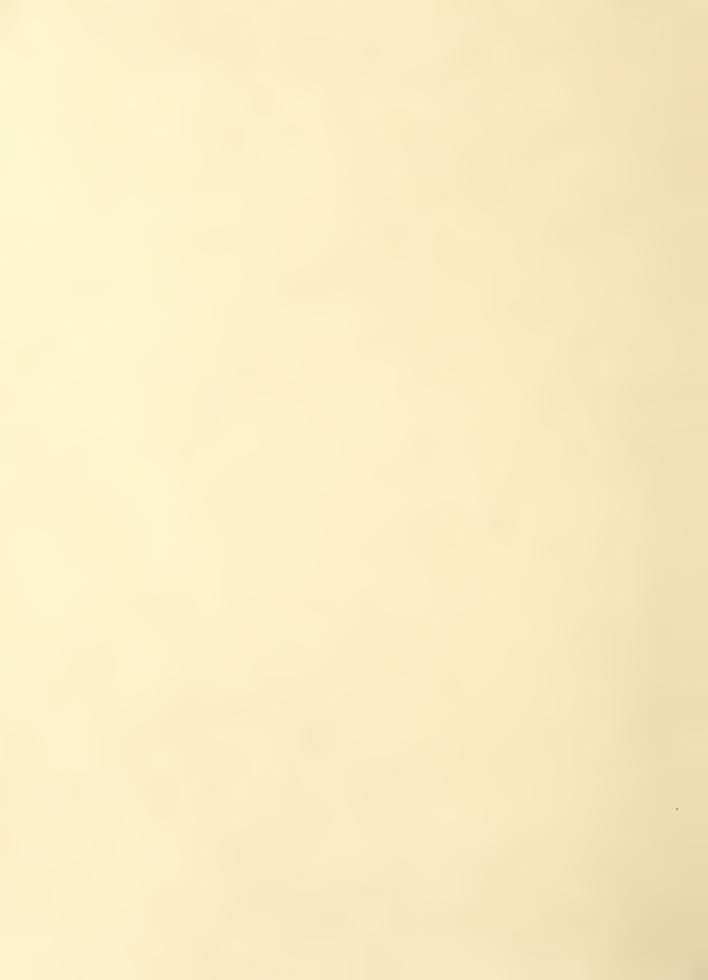
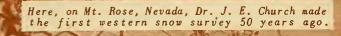
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U. S. DEPARTMENT OF AGRICULTURE

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEY and WATER SUPPLY FORECASTS for OREGON

UNITED STATES DEPARTMENT of AGRICULTURE
SOIL CONSERVATION SERVICE

and

OREGON AGRICULTURAL EXPERIMENT STATION

were obtained by the agencies named above in cooperation with other Federal. State and private organizations.

APR. 1, 1959

UNITED STATES DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

The climate of the cultivated and populated areas of the West is characterized by relatively dry summer months. Such precipitation as occurs falls mostly in the winter and early spring months when it is of little immediate benefit to growing crops. Fortunately, most of this precipitation falls as mountain snow which stays on the ground for months, melting later to sustain streamflow during the period of greatest demand during late spring and summer. Thus, nature provides in mountain snow an imposing water storage facility.

The amount of water stored in mountain snow varies from place to place as well as from year to year and accordingly, so does the runoff of the streams. The best seasonal management of variable western water supplies results from fore-knowledge of the runoff.

A snow survey consists of a series of about ten samples taken with specially designed snow sampling equipment along a permanently marked line, about 1000 feet in length, called a snow course. The use of snow sampling equipment provides snow depth and water equivalent values for each sampling point. The average of these values is reported as the snow survey measurement for a snow course.

Snow surveys are made monthly or semi-monthly beginning in January or February and continue through the snow season until April, May or June. Currently more than 1300 western snow courses are measured each year. These measurements furnish the key data for water supply forecasts.

By relating snow survey measurements taken over a period of years to spring-summer runoff during the same period, relationships have been developed which make it possible to forecast seasonal runoff several months in advance of occurrence. In order to make a forecast, once a forecast relationship has been developed, the maximum snow water content at previously selected key snow courses is usually entered in the forecast relationship. More accurate forecasts are often obtained when other factors such as soil moisture, base flow and spring precipitation are considered and included in the forecast relationships.

Listed below are the Federal-State-Private Cooperative Snow Survey and Water Supply Forecast reports available for the West which contain detailed information on snow survey measurements, streamflow forecasts, reservoir storage, soil moisture and other guide data to water management and conservation decisions.

PUBLISHED BY SOIL CONSERVATION SERVICE

REPORTS	ISSUED	COOPERATING WITH	LOCATION
RIVER BASINS			
COLORAGO, RIO GRANGE	MONTHLY (FEBMAY)	COLO. EXP. STATION	FT. Collins, Colo.
COLUMBIA Includes Alaska.	MONTHLY (JANMAY)		BOISE, IOAHO
UPPER MISSOURI	MONTHLY (FEBMAY)	Mont.Agr.Exp.Station	BOZEMAN, MONTANA
WEST-WIOE	(OCT. 1, APR. 1 AND MAY 1)	COOPERATORS	Portlano, Oregon
STATES			
ARIZONA	SEMI-MONTHLY (JAN. 15-APR.1)	SALT R. VALLEY WATER	PHOENIX, ARIZONA
NEVAOA	MONTHLY (FEB APR.)	NEVAOA STATE ENGINEER	RENO. NEVAOA
OREGON	(YANMAY)	ORE.AGR.EXP.STATION	Portlano, Oregon
UTAH	Monthly (JanMay)	UTAH STATE ENGINEERUTAH AGR.EXP.STATION	SALT LAKE CITY, UTAH
Washington	Monthly (FEBMay)	Wash. State Deptof Conservation	SPOKANE, WASHINGTON
WYOMING	Monthly (FEBJune)	WYOMING STATE ENGINEER	CASPER, WYOMING
Copies of th	e various reports may be	secured from: Head, Water Supply Soil Conservation	

PUBLISHED BY OTHER AGENCIES

0

209 S.W. 5th Avenue, Portland 4, Oregon

OTHER SNOW SURVEY REPORTS	
BRITISH COLUMBIA	(FEBJUNE)
CaliforniaMonthly	(FEBMAY)

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEY and WATER SUPPLY FORECASTS for OREGON

ISSUED

April 8, 1959

Report prepared by

W. T. FROST, Snow Survey Supervisor

and

MANES BARTON, Assistant Snow Survey Supervisor

SOIL CONSERVATION SERVICE 209 S.W. 5th AVE. PORTLAND 4. OREGON

Issued by

THOMAS P. HELSETH
STATE CONSERVATION SERVICE

F. EARL PRICE

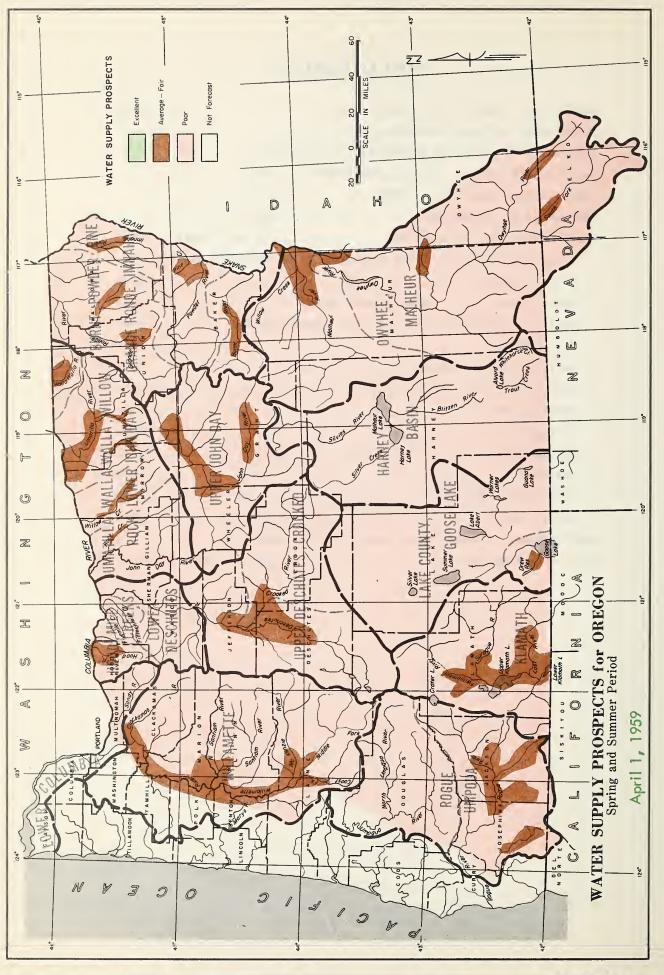
DIRECTOR

OREGON AGRICULTURAL
EXPERIMENT STATION



TABLE OF CONTENTS

	P A	A G E
WATER SUPPLY PROSPECTS FOR OREGON	G PAGE	: 1
WATER SUPPLY OUTLOOK FOR OREGON		, 1
STORAGE STATUS OF OREGON RESERVOIRS(MAP)		, з
WATER CONTENT OF SNOW ON OREGON WATERSHEDS(MAP)	• • • • •	. 4
SNOW WATER ACCUMULATION IN OREGON(GRAPH)		. 5
CURRENT OREGON STREAMFLOW(GRAPH)		. 6
VALLEY PRECIPITATION IN OREGON(MAP AND TABLE)		. 7
DETAILED WATER SUPPLY OUTLOOK BY MAJOR WATERSHED AREAS		
OWYHEE. MALHEUR	AREA	1
BURNT. POWDER, PINE, GRANDE RONDE, IMNAHA	AREA	2
UMATILLA. WALLA WALLA. WILLOW. ROCK. LOWER JOHN DAY	AREA	3
UPPER JOHN DAY	AREA	4
UPPER DESCHUTES. CROOKED	AREA	5
Hood, Mile Creeks. Lower Deschutes	AREA	6
LOWER COLUMBIA	AREA	7
WILLAMETTE	AREA	8
ROGUE, UMPQUA	AREA	9
KLAMATH	AREA	10
LAKE COUNTY. GOOSE LAKE	AREA	11
HARNEY BASIN	AREA	12
MAP AND INDEX OF OREGON SNOW COURSES(MAP)		
LICT OF COOREDATORS		



WATER SUPPLY OUTLOOK for OREGON

April 1, 1959

Oregon's 1959 water supply outlook for the irrigation season, April through September, remains "fair" to extremely poor" except for those lands which have adequate reservoir facilities. Reservoired water supplies for irrigation are well above normal. The mountain snow-pack continues to be extremely short this year. Accumulation of snow during March was below normal in most areas.

SNOW-COVER:

Water content of the state-wide mountain snow-pack in Oregon averages only 61 percent of the April 1 normal. Maximum accumulation of the snow-pack normally occurs by April 1st.

SOIL MOISTURE:

The soil-mantle under the mountain snow-pack is still only partially wet except on the main Cascades and in the northeastern Oregon counties where moisture penetration is satisfactory. Soils in southeastern Oregon are exceptionally dry.

RESERVOIRED WATER:

Stored water in 22 irrigation reservoirs is 110 percent of the average April 1 amount. Good "carry-over" supplies from last year help to make this year's figure satisfactory. Reservoired water will literally "save the day" for many areas this season.

Most stock ponds on Oregon range lands are still short of water.

PRECIPITATION:

State-wide precipitation ¹ at 15 selected stations has been 85 percent normal in March. Total precipitation since October 1 has averaged 90 percent of normal.

STREAMFLOW:

Flow of key Oregon streams ² during March has been below average varying from 96 percent normal on Hood River to a low of 21 percent on the Owyhee.

Forecasts of April-September runoff range from lows of 17 and 26 percent normal on Owyhee and Silvies Rivers to near 100 percent on the Applegate, Illinois, and Wallowa Rivers.

Other forecasts for the April-September runoff (in percentages of normal) are as follows: Malheur River, 55; Burnt, 60; Powder, 68; Grande Ronde, 68; Umatilla, 86; Walla Walla, 77; John Day, 76; Crooked, 48; Deschutes, 74; Willamette, 85; North Umpqua, 85; Rogue, 69; Klamath Lake, 90; Chewaucan, 55; Blitzen River, 56.

(CONTINUED - - - - - -)

 $^{^1}$ From preliminary data furnished by U.S. Weather Bureau, Portland, Oregon. 2 From preliminary data furnished by U.S. Geological Survey, Portland, Oregon.

Many small streams heading in low elevations will have extremely poor runoff this season.

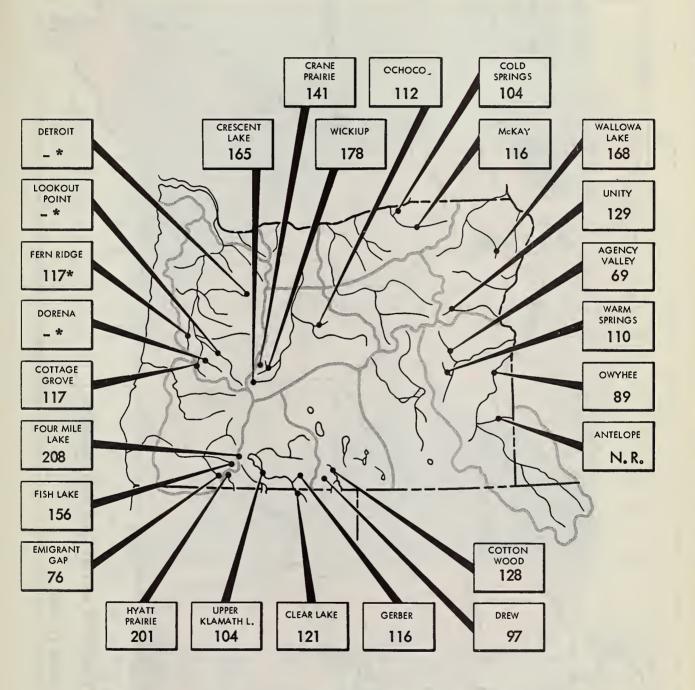
WATER MANAGEMENT:

Farmers and ranchers in Oregon can improve their water management efficiency by the following practices:

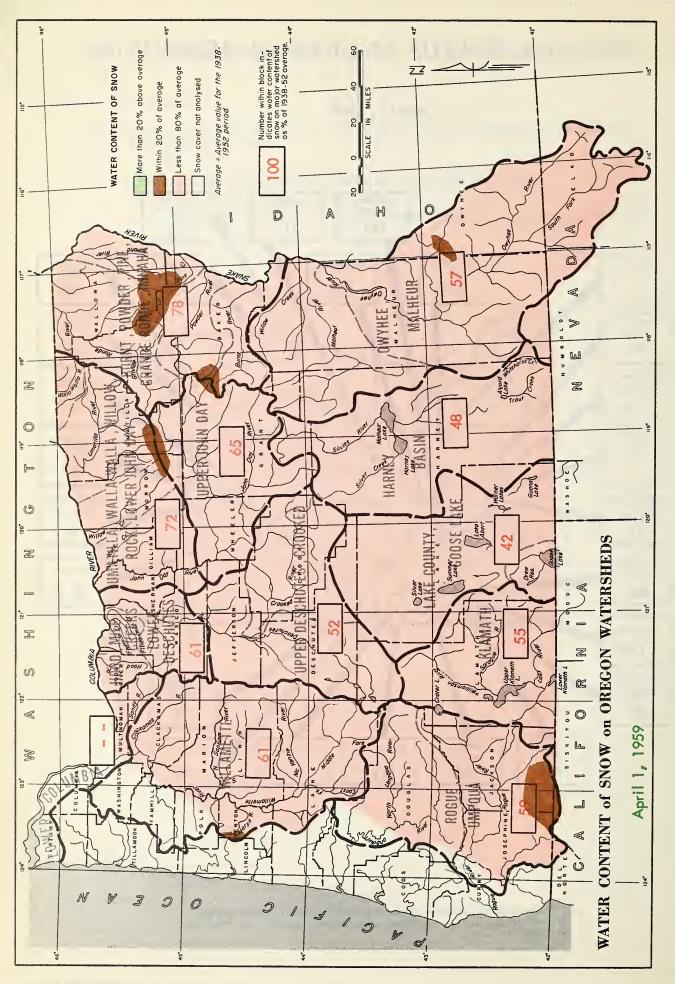
- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with their Soil Conservation Service technician and County Agent.

STORAGE STATUS of OREGON RESERVOIRS

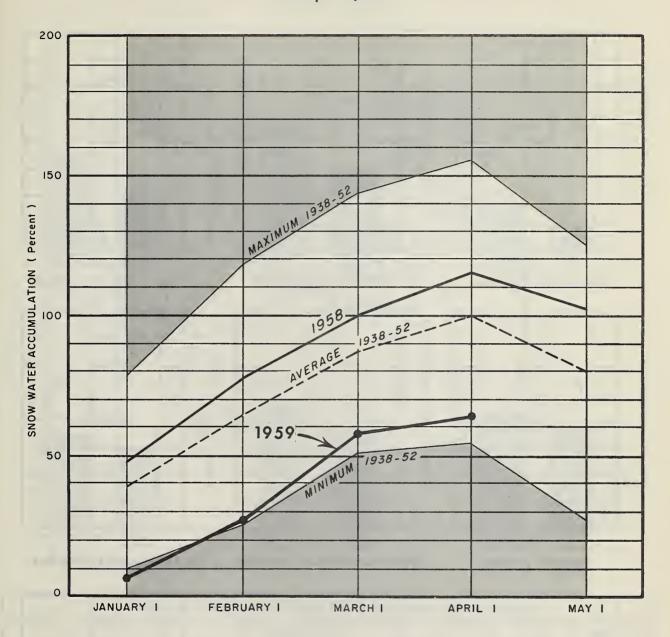
April 1, 1959



Figures given ore usoble storage os percent of 1938-52, 15 yeor overage.
*- Multiple purpose reservoir - space reserved primorily for flood runoff.
N.R. - No report.



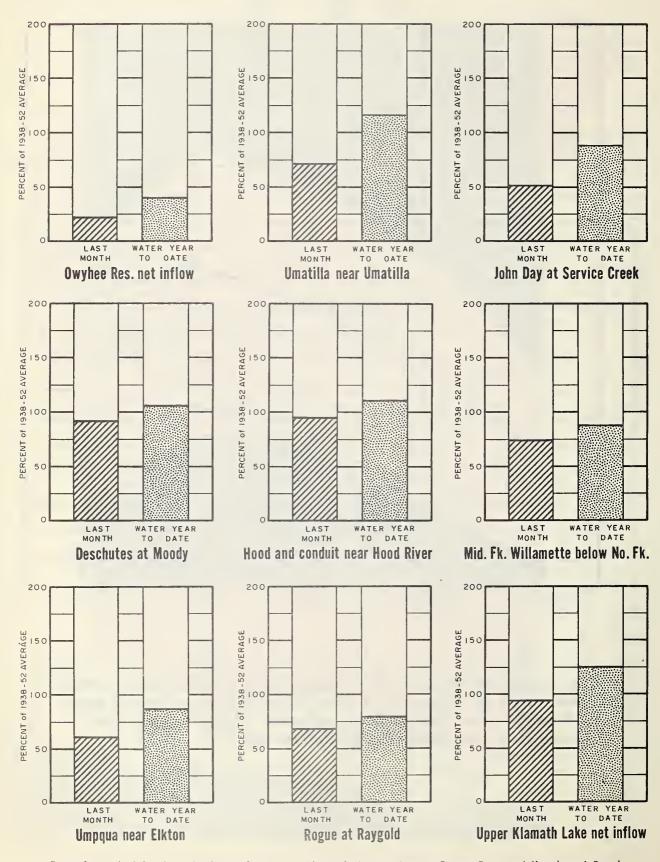
SNOW WATER ACCUMULATION in OREGON April 1, 1959



The accumulation of snow water in Oregon watersheds has continued much below normal all winter. As of April 1st this year there is only 63 percent of a normal winter's snow-pack on the ground. The snow-pack usually reaches peack accumulation (100 percent) by April 1st.

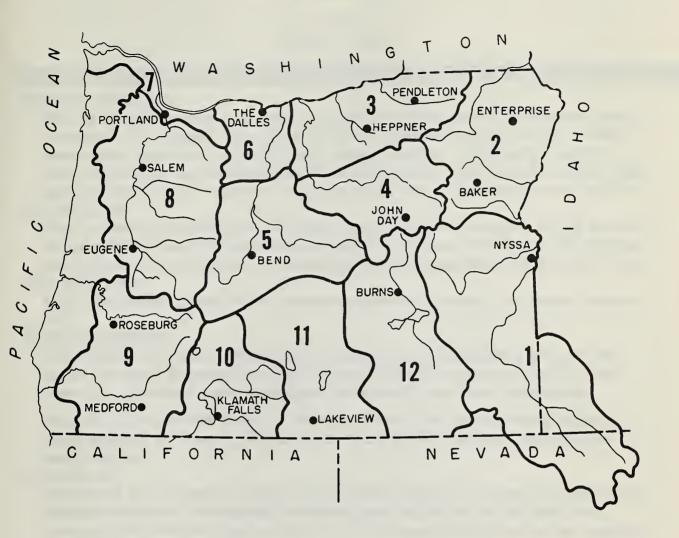
CURRENT OREGON STREAMFLOW

April 1, 1959



Data furnished by U.S. Geological Survey; The California Oregon Power Co.; and North and South Boards of Control Owyhee Project. Water year begins Oct. 1, 1957.

VALLEY PRECIPITATION in OREGON° April 1, 1959



PRE	CIPITATION	as PERCE	NT of the 1938-52 AV	ERAGE	
STATION	LAST MONTH	WATER b YEAR TO DATE	STATION	L AST MON TH	WATER b YEAR TO DATE
Baker Apt. Bend Burns Enterprise Eugene Apt. Heppner John Day ^d Klamath Falls Apt.	147 100 148 86 87 106 c 46	91 61 65 123 114 120 46	Lakeview Medford Apt. Nyssa Pendleton Apt. Portland Apt. Roseburg Apt. Salem Apt. The Dalles	51 51 51 85 83 66 101 117	52 64 49 120 87 92 103 89

^aPreliminary data furnished by the U.S. Weather Rureau. ^bOct. 1 to date. ^cReport delayed. dAs percent of Canyon City average.



WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period) in Malheur County continues to be extremely poor except for lands served from reservoir facilities where stored water is sufficient to furnish nearly normal supplies. Next year's irrigation water supplies will be completely dependent upon a heavy winter snowfall unless water users can manage some "carry-over" supplies in their reservoirs through very careful use.

SNOW-COVER

Water content of the mountain snow-pack is only 57 percent of normal and 39 percent of last year at this date. There is almost no snow at all below 6,000 feet on the Owyhee and 5,000 feet on the Malheur as determined by aerial observations on the 2nd of April.

SOIL MOISTURE

Soils in the higher portions of the watershed remain only partially wet under the snow-pack.

RESERVOIR STORAGE

Stored water in Owyhee, Warmsprings, and Agency Valley Reservoirs is 91 percent normal and about 20 percent less than last year. There is no "extra" water in these reservoirs. Individual water users should practice efficient water management.

Malheur Lake on Willow Creek has about 20,400 acre feet now in storage and Pole Creek Reservoir has about 1,800 acre feet. Stock ponds throughout the county are mostly unfilled.

STREAMFLOW

Forecasts of April-September runoff on the Malheur River have increased slightly to 55 percent of normal at Drewsey and 59 percent normal at Beulah on the North Fork. Forecasted inflow to the Owyhee Reservoir for the same six month period has decreased to 17 percent of the normal flow.

Jordan Creek will have about half of a normal flow and smaller streams, such as Bully, Cottonwood, Sucker, and others, will have extremely short flows this season.

WATER MANAGEMENT

Farmers and ranchers in Malheur County can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with their Soil Conservation Service technician and County Agent.

Report prepared by .

W.T. Frost and Manes Barton
U.S. Department of Agriculture, Soil Canservation Service
209 S.W. Filth Avenue, Portland, Oregon

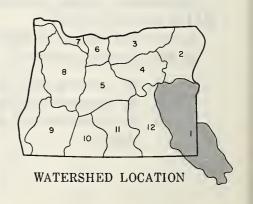
STREAM or AREA	FLOW P	ERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REMARKS
Boulder Creek Bully Creek	Fair Poor	Poor Poor	Much above normal rains during the April-June
Cow Creek Jordan Creek	Poor Fair	Poor Poor	period will be necessary to improve these defi-
Jordan Valley Irrigation District	Average	Poor	cient outlooks.
McDermitt Creek Oregon Canyon Creek	Poor	Poor Poor	
Owyhee Project Sucker Creek	Average Poor	Fair Poor	
Ten Mile Creek	Poor	Poor	
Vale, Oregon Irrigation District Warm Springs Irrigation District	Average Average	Fair Fair	
Willow Creek	Fair	Poor	
			11

STREAMFLOW FORECASTS ° (1.000 Ac. Ft.)

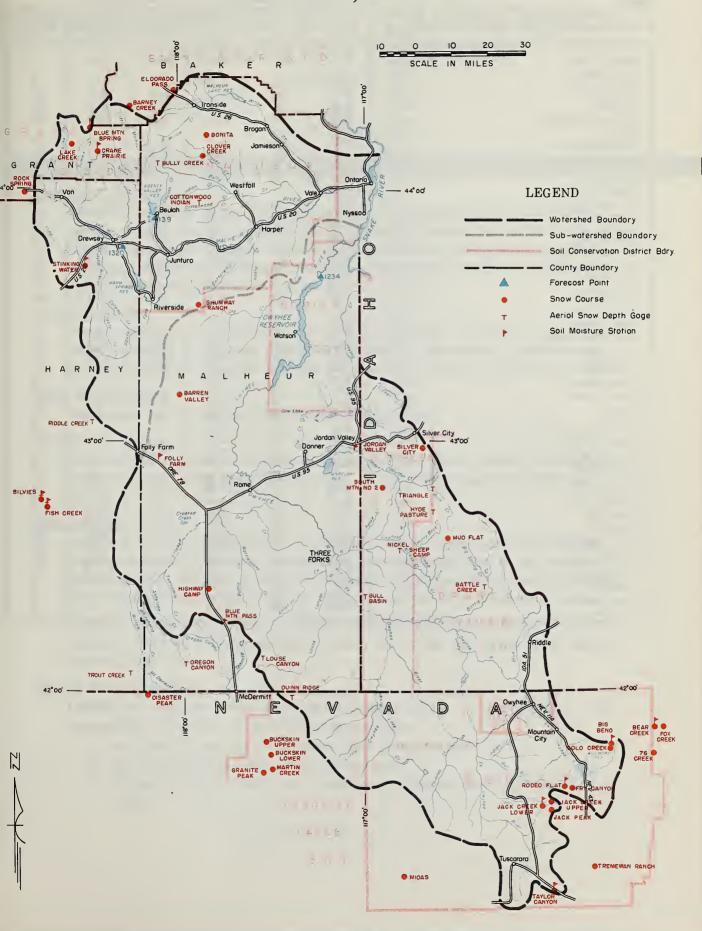
FORECAST POINT	FORECAST	FORECAST	NORMAL	THIS YEAR AS PERCENT
NAME	THIS TEAR	PERIOD		OF NORMAL
Malheur near Drewsey	45	April-Sept.	82	55
Malheur North Fork at Beulah ^e	38	April - Sept.	64	59
Owyhee Reservoir net Inflow ^h	80 75 d	April — Sept. April — July March—July	458 440 570	17 17
	Malheur near Drewsey Malheur North Fork at Beulah ^e	Malheur near Drewsey Malheur North Fork at Beulahe Owyhee Reservoir net Inflowh 80 75	Malheur near Drewsey Malheur North Fork at Beulahe Owyhee Reservoir net Inflowh 80 April – Sept. April – Sept. April – Sept. April – July	Malheur near Drewsey 45 April—Sept. 82 Malheur North Fork at Beulah ^e Owyhee Reservoir net Inflowh 80 April—Sept. 458 April—July 440

RESERVOIR STORAGE (1,000 Ac. Ft.)

OTOTINGE TI,000						
RESERVOIR	USABLE	MEASURED (First of Month) THIS YEAR LAST YEAR NORM.				
NESENVOIR	CAPACITY					
Agency Valley	60.0	34.5	57.2	49.8		
Antelope	36.5	g	23.3	18.4		
Owyhce	715.0	523.8	637.4	590.3		
Warm Springs	191.0	133.8	159.7	121.1		



OWYHEE, MALHEUR WATERSHEDS



WOW		CURF	PAST RECORD			RECORD		
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONTENT (Inches)		YEARS OF	
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD	
	5950	3-23	10	F 0	30.0	0.1	8	
Borney Creek Borren Volley	4200	8	19	5.9	10.0	9-4	٥	
Bottle Creek ^f	5700	4-2	0	0.0			0	
Beor Creek	7800	3-27	52	18.1		22.1	10	
Bed Creek	6700	3-26			23.4	-	12	
•	5900	3-25	15	5.4	15.2	12.8		
Blue Mountoin Springs Banito	4600	8	27	10.1	21.2	15.8	15	
Buckskin, Lower	6700	4-1	15	6.0	14.0	8.7	11	
- ·	7200	4-1	19	7.4	21.0	10.5	14	
Buckskin, Upper Bull Bosin <i>f</i>	5600	4-2	0	0.0		10.7	Ö	
Bully Creek ^f	5300	4-2	0	0.0			Ö	
	4100	3-25	l ŏ l	0.0	0.0		ŏ	
Clover Creek	4320	4-2		0.0	0.0		ő	
Cattanwood – Indionf	5375	3-25		6.4	13.6	8.8	15	
Crane Proire.		3-29	15			0.0	4	
Disaster Peak	6500		19	7.5	18.3		0	
Eldarada Pass	4600	3-25	0	0.0	0.0	26.1	13	
Fish Creek ^f	7900	3-27	39	12.9	37.9		13	
Fox Creek	6800	3-27	18	5.9	12.3	8.8	12	
ry Conyon	6700	3-26	T	T	14.9	10.2		
Gald Creek	6600	3-26	8	2.8	10.5	7.0	12	
Gronite Peok	780C	4-2	30	11.0		11.8	11	
Highwoy Comp	4300	g 4-2	0	0.0			_	
Hyde Posture f	5800			T.			0	
Jock Creek, Lower	6800	3-27	18	6.1	9.3	2.7	12 12	
Jock Creek, Upper	7250					11.4		
Jack Peak	8420	3-27	54	18.5	41.3	303	0	
_ake Creek	5120	3-25	19	6.7	15.3	10.1	15	
_ause Conyan ^f	6440	3-27	0	0.0			0	
Martin Creek	7200	4-1	20	7.7	14.2	8.2	11	
Midos	5700	3-31	0	0.0	8.4	2.1	11	
Mud Flot	5500	3-26	8	3.0			0	
Nickel Sheep Comp [†]	5450	4-2	0	0.0			0	
Oregan Conyon f	7240	3-27	12	4.1			0	
Quinn Ridge f_{\parallel}	6200	3-27	0	0.0			0	
Riddle Creek ^f	5800	3-27	0	0.0			0	
Rock Springs	5100	3-26	3	1.0	9.0	4.7	15	
Rodeo Flat	6800	3-26	3	0.9	16.8	10.9	12	
Shumway Ronch	4500	3-25	0	0.0	0.0		0	
Silver City	6400	3-28	31 21	10.1	17.6	15.0	8	
Silvies f	6900	4-1	21	6.9	17.5	14.6	14	
Sauth Mountoin Na. 2	6340	3-31	31	10.5	14.0	11.5	12	
Stinking Woter	4800	3-27	0	0.0	T	1.2	13	
Taylar Conyon	6200	3-27	0	0.0	8.3	4.2	12	
Tremewon Ronch	5700	3-26	0	0.0	T	1.1	11	
Triangle f	5150	4-2	0	0.0			0	
Trout Creek f	7800	3-27	10	3.4			0	
76 Creek	7100	3-25	26	7.7			4	

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS

OREGON

as of
April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period) for north-eastern Oregon has not improved during March and remains fair to poor on the Burnt, Powder, and Grande Ronde Rivers except where stored water supplies will "save the day". Streams flowing from the Wallowa Mountains will have near normal water supplies this year.

SNOW-COVER

Water content of the mountain snow-pack is 78 percent of normal in this three-county area but is very near normal in the Wallowa Mountains. Snow is conspicuously missing from most low-elevation points normally covered at this date.

SOIL MOISTURE

Watershed soils under the snow-pack are well wetted.

RESERVOIR STORAGE

Stored water supplies are 151 percent of normal and should provide satisfactory water for lands served from these sources. Thief Valley Reservoir is full as usual.

STREAMFLOW

Forecasts of April-September runoff in northeastern Oregon have been revised slightly downward since the accumulation of snow during March was below normal at most stations. Burnt River is forecast at 60 percent of normal, Powder River at 68 percent normal, and the main Grande Ronde at 68 percent normal.

Forecasts of Catherine Creek, Wallowa, and Lostine River are set at 97 percent normal. Smaller streams heading in lower elevations will have much below normal summer flows.

WATER MANAGEMENT

Farmers and ranchers in the northeastern Oregon region can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with your Soil Conservation Service technician and County Agent.

U. S Department of Agriculture, Soil Conservation Service 209 S. W Fifth Avenue, Portland, Oregon

STREAM or AREA	FLOW P	ERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REWARKS
Alder Slope	Average	Fair	
Baker Volley	Fair	Poor	
Big Creek	Fair	Poor	
Clover Creek	Poor	Poor	
Cove	Fair	Fair	
Durkee	Fair	Poor	
Eogle Volley	Average	Fair	
Elgin	Fair	Poor	
Enterprise - Joseph	Average	Average	
Hereford - Bridgeport	Average	Fair	
Imnaho River	Average	Average	
LaGronde – Island City	Fair	Poor	
Lostine – Wollowo	Average	Average	
North Powder River - Wolf Creek	Fair	Poor	
Pine Volley	Average	Average	
Powder River - Elk Creek	Fair	Poor	
Summerville	Fair	Poor	
Sumpter Volley	Fair	Poor	
Union – Hot Loke	Average	Fair	
Unity	Fair	Poor	

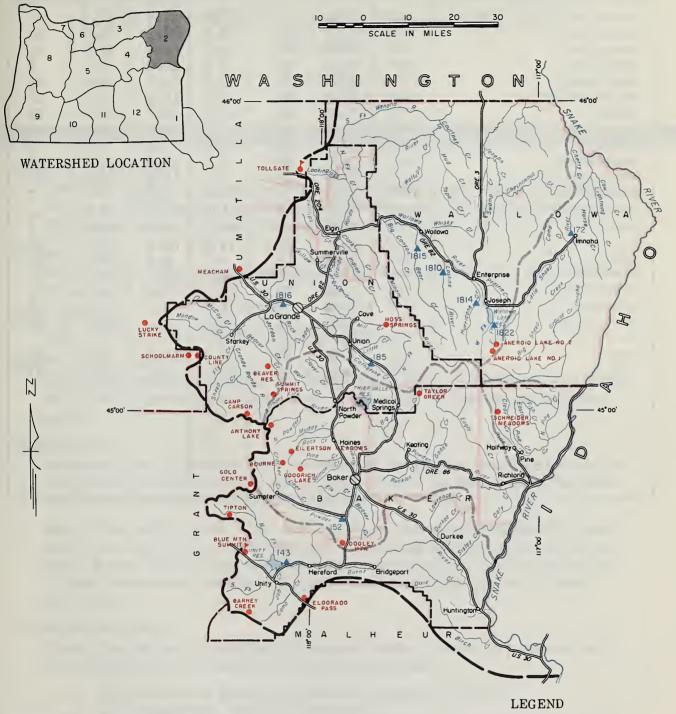
STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

	FORECAST POINT	FORECAST	FORECAST	wanta b	THIS YEAR
NO.	NAME	THIS YEAR	PERIOD	NORMAL	AS PERCENT OF NORMAL
1815	Bear near Wallowa	66	April-Sept.	69	96
143	Burnt neor Hereford ^e	25	April-Sept.	42	60
185	Cotherine neor Union	69	April-Sept.	71	97
1816	Gronde Ronde of LoGronde	120	April-Sept.	177	- 68
1814	Hurricone neor Joseph	38	April-Sept.	45	84
172	Imnoho ot Imnoho	280	April-Sept.	303	92
1810	Lostine neor Lostine	120	April-Sept.	124	97
152	Powder neor Boker	43	April-Sept.	63	68 68
1822	Wollowo Eost Fork neor Joseph ^e	10.5 8.5	April – July April – Sept. April – July	62 11.3 9.2	93 92
		0.0	April Odry		/~

^{**}Assuming narmal meteorological conditions. ** 1938-'52,15 year period. **Number of years in 1938-'52 period. **Not scheduled. **Carrected to natural flow.

Aerial snow depth goge; water content estimated. **Report delayed.

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE	USABLE MEASURED (First of Mont				
RESERVOIN	CAPACITY	THIS YEAR	NORMAL b			
Unity Wallowa Lake	25.2 40.9	19.2 34.1	12.3 26.6	14.9 20.3		

Sub-watershed Boundary
Sub-watershed Boundary
Sail Conservation District Bdry
County Boundary
Forecast Point
Snaw Course
Sail Maisture Station

MOM		CURE	RENT INFORMAT	TION	PAST R	ECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONT	ENT (Inches)	YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Aneroid Lake No. I	7480	3-24	96	36.0	37.9	37.3	15
Aneroid Loke No. 2	7000	3-25	68	25.5	32.1	30.3	11
Anthony Lake	7125	3-26	62	19.7		28.0	15
Barney Creek	5950	3-23	19	5.9	10.0	9.4	8
Beover Reservoir	5340	3-30	26	9.2	11.7	12.0	14
Blue Mountain Summit	5098	3-27	14	4.2	11.5	7.8	15
Bourne	5800	3-25	41	13.3	20.7	15.9	15
Camp Carson	5970	3-24	19	5.5	9.0	8.8	13
County Line	4800	3-30	10	3.8	5.8		i
Dooley Mountoin	5430	3-24	20	6.5	13.2	9.1	14
Eilertson Meadows	5400	3-28	20	7.2	16.9	11.9	15
Eldorado Poss	4600	3-25	0	0.0	0.0		0
Gold Center	5340	3-25	30	10.4	16.3	12.0	14
Goodrich Loke	6775	3-25	75	28.7		41.4	5
Lucky Strike	5050	4-1	36	11.6	16.4	13.1	14
Meocham	4300	3-25	17	6.1	8.9	8.7	15
Moss Springs	5850	3-25	70	23.5	27.4	25.1	15
Schneider Meodows	5400	3-24	79	28.1	37.0	29.9	15
Schoolmorm	4775	3-30	4	1.5	4.4	3.6	6
Summit Springs	6000	3-26	54	15.0		21.1	14
Taylor Green	5740	g					
Tipton	5100	3-24	23	6.8	14.2	9.7	13
Tollgote	5070	3-25	54	20.3	30.1	27.9	15
						2107	
			-				

WATER SUPPLY OUTLOOK

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period) for the Umatilla, Morrow and Gilliam Counties remains fair to poor except for those lands served from Cold Springs and McKay Reservoirs, which have satisfactory supplies.

SNOW-COVER

Water content of the mountain snow-pack is 72 percent normal but is only 37 percent of last year's snow crop.

SOIL MOISTURE

Soils in the mountain watersheds are well wetted.

RESERVOIR STORAGE

Cola Springs Reservoir is already full and McKay is within 5,000 acre feet of the top. This excellent stored water supply will "save the day" for lands served from these sources.

STREAMFLOW

Forecasts of April-September runoff for McKay Creek and the Umatilla River are set at 62 and 86 percent of normal, respectively. Flow of the South Fork of the Walla Walla River is forecast at 77 percent of normal.

Most of the smaller streams in this area can expect serious water shortages by about mid-June or earlier if adequate May-June rains are not received. The outlook for Birch, Butter, Willow, Rhea and Rock Creeks improved during the past month with a greater than normal increase in the snow-pack in the higher portions of these watersheds.

WATER MANAGEMENT

Farmers and ranchers in Umatilla, Gilliam and Morrow Counties can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "rons".
- 2. By concentrating water on better soils.
- 3. By consulting with your Soil Conservation Service technicians and County Agent.

Report prepared by:

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209 S.W. Fifth Avenue, Portland, Oregon

WATER SUPPLY OUTLOOK °

STREAM or AREA	FLOW P	ERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REWARKS
Birch Creek	Average	Fair	
Butter Creek	Average	Fair	
Dry Creek	Fair	Poor	
Dugger Creek	Fair	Poor	
Johnson Creek	Fair	Poor	
McKay Creek	Fair	Poor	
Mill Creek	Fair	Fair	
Mud Creek	Fair	Poor	
Pine Creek	Fair	Poor	
Rhea Creek	Average	Fair	
Rock Creek	Average	Fair	
Umatilla River (Cold Springs Res.)	Average	Fair	
Umatilla River, Main	Average	Fair	
Umatilla River (McKay Res.)	Average	Fair	
Walla Walla River, Little	Average	Fair	
Walla Walla River, Main	Average	Fair	
Walla Walla River, Narth Fark	Average	Fair	
Walla Walla River, Sauth Fark	Average	Fair	
Willow Creek	Average	Fair	

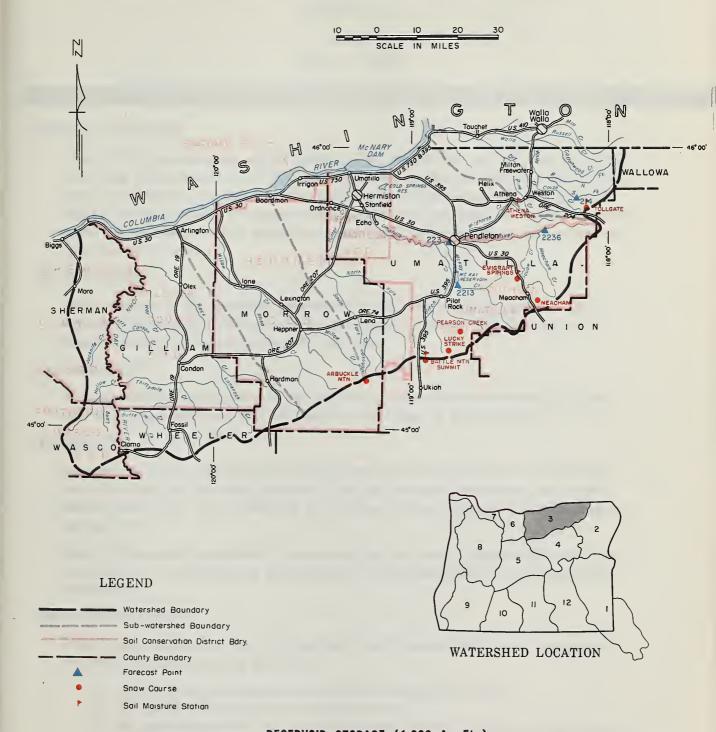
STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	NORMAL	THIS YEAR AS PERCENT OF NORMAL
2213	Mc Kay near Pilot Rock	17.5 17.0	April-Sept. April-July	28 28	62 61
2236	Umatilla near Gibbon	75	April-Sept.	87	86
223	Umatilla at Pendleton	144 134	April-Sept. April-July	167 155	86 86
214	Walla Walla, South Fark near Milton	54 45	April-Sept. April-July	71 58	77 77
***		45	April-July	58	77

SNOW		CURF	ENT INFORMAT	TION	PAST R	ECORD	
SNOW COURSE NAME ELEVATION		DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONT	ENT (Inches)	YEARS OF C RECORD
Arbuckle Mountain Battle Mauntain Summit Emigrant Springs Lucky Strike Meacham Pearson Creek Tollgate	5400 4340 3925 5050 4300 3000 5050	3-30 3-27 3-25 4-1 3-25 4-1 3-25	29 2 3 36 17 0 54	10.5 0.2 1.2 11.6 6.1 0.0 20.3	14.7 1.4 16.4 8.9 30.1	10.8 5.8 13.1 8.7 27.9	15 0 15 14 15 0 15

^{**}Assuming normal meteoralogical canditions. **\(\text{\$\text{\$0}}\)|938 - \('52, 15\) year period. **Number of years in 1938 - \('52\) period. **\(\text{\$\text{\$0}}\)Not scheduled. **Carrected to natural flow. *\(\text{\$\text{\$Aerial}\$ snow depth gage; water content estimated.}\(\text{\$\text{\$0}\$ Report delayed.}\)

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE	MEASU	RED (First of M	onth)
MESERVOIN.	CAPACITY	THIS YEAR	LAST YEAR	NORMAL b
Cold Springs Mc Kay	50.0 74.0	50.0 68.5	50.0 66.1	48.2 58.9

Umatilla, Walla Walla, Willow, Rock, Lower John Day Watersheds

WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

as of
April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period), for the Upper John Day watersheds has not improved during March and continues to be only fair. Snow accumulation on the mountain watersheds was below normal during March and is now only half of the amount measured at this date last year. Most irrigated acres are sure to have late season water shortages and many areas will be short of water by late June.

SNOW-COVER

Water content of the mountain snow-pack is only 65 percent of normal. Only at Arbuckle Mountain is the snow-cover near normal. Below 4700 feet elevation there is almost no snow to be found in the area.

SOIL MOISTURE

Watershed soils, particularly at the higher elevations under the snow-pack, are still only moderately wet and will require melt water to prime them.

STREAMFLOW

Forecasts of April-September runoff have been revised downward to 74 to 76 percent of normal on the main John Day River and its major tributaries, the North and Middle Forks. This is because snow-cover did not increase in normal amounts during March.

Most of the smaller streams will experience serious water shortages this year with some as early as mid-June or even earlier if satisfactory May-June rains are not received.

WATER MANAGEMENT

Farmers and ranchers in the John Day Basin can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with your Soil Conservation Service technician and County Agent.

Report prepared by:

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WATER SUPPLY OUTLOOK °

STREAM or, AREA	FLOW P	ERIOD	REMARKS
STREAM OF, AREA	SPRING SEASON	LATE SEASON	REWARKS
Beech Creek	Fair	Poor	
Beech Creek-Fox-Long Creek	Fair	Poor	
Bridge - Mountain Creeks	Fair	Poor	
Camas Creek	Fair	Fair	
Cherry Creek	Fair	Poor	
Indian-Pine Creeks	Fair	Fair	
John Day River, Main Fork	Fair	Fair	
John Day River, Mid. Fork	Fair	Fair	
John Day River, North Fork	Fair	Fair	
John Day River, South Fork	Fair	Fair	
Monument - Kimberly	Fair	Fair	
Strawberry Creek	Fair	Fair	

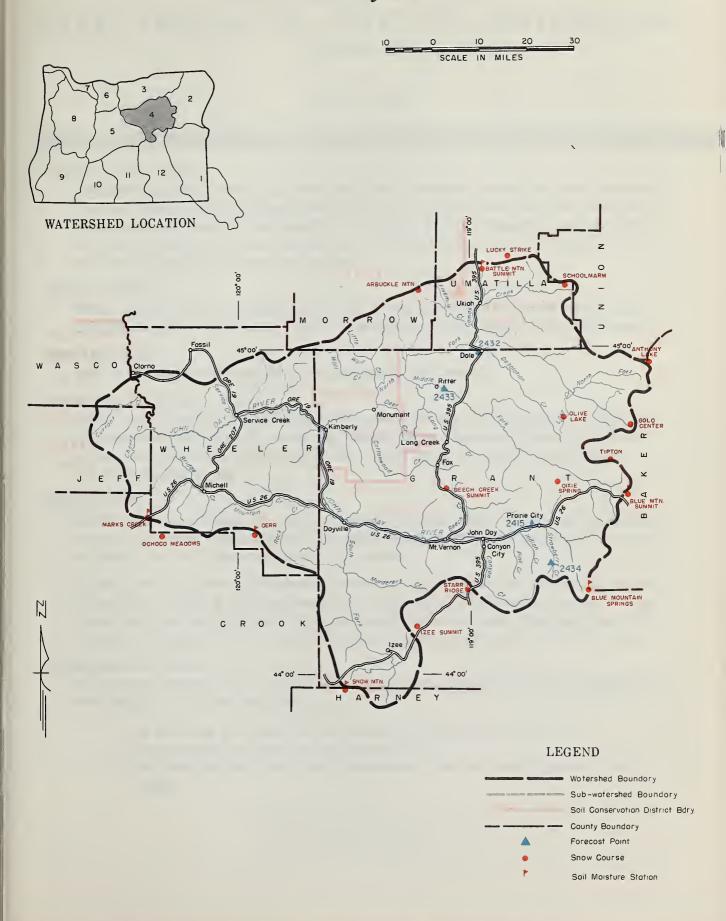
STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	NORMAL ^b	THIS YEAR AS PERCENT OF NORMAL
2415	John Day at Prairie City	38 34	April-Sept. April-July	50 45	76 76
2433	John Day, Mid Fork at Ritter	90	April-Sept.	122	74
2432	John Day, North Fork near Dale	185	April-Sept.	248	75
2434	Strawberry near Prairie City	6.1	April-Sept.	8.3	73

SNOW				PAST RECORD			
SUOM		CURF	RENT INFORMAT		PASIF	RECORD	
SNOW COURSE	SNOW COURSE		SNOW DEPTH	WATER	WATER CONT	ENT (Inches)	YEARS OF C
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Anthony Lake	7125	3-26	62	19.7		28.0	15
Arbuckle Mountain	5400	3-30	29	10.5	14.7	10.8	15
Battle Mountain Summit	4340	3-27	2	0.2		~ ~	0
Beech Creek Summit	4800	3-25	0	0.0	4.8	4.7	15
Blue Mountain Springs	5900	3-25	27	10.1	21.2	15.8	15
Blue Mountain Summit	5098	3-27	14	4.2	11.5	7.8	15
Derr	5670	3-25	23	7.9	10.5	10.3	15
Dixie Springs	6650	3-27	48	16.1	27.7	23.9	15
Gold Center	5340	3-25	30	10.4	16.3	12.0	14
Izee Summit	5293	3-26	10	3.8	12.4	7.5	15
Lucky Strike	5050	4-1	36	11.6	16.4	13.1	14
Marks Creek	4540	3-26	T	T	1.2	3.3	15
Ochoco Meadows	5200	3-27	20	6.6	15.4	11.3	15
Olive Lake	6000	3-30	53	14.8	26.7	19.9	15
Schoolmarm	4775	3-30	4	1.5	4.4	3.6	6
Snow Mountain	6300	3-27	26	8.4	17.1	15.1	9
Starr Ridge	5156	3-26	4	1.3	6.2	4.7	15
Tipton	5100	3-24	23	6.8	14.2	9.7	13

Assuming narmal meteoralogical conditions
 1938 - '52, 15 year period.
 Number of years in 1938 - '52 period.
 Apriol snow depth gage; water content estimated.
 Report delayed.

UPPER JOHN DAY WATERSHEDS





WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period) for the Deschutes-Crooked area of central Oregon is extremely poor except for those lands served from major reservoirs where water supplies will be more nearly adequate. This area has only half a "snow crop" this year and will need unusually heavy precipitation in the April-June period to improve the outlook.

SNOW-COVER

Water content of the mountain snow-pack is only 52 percent of normal and 45 percent of last year's snow-pack. Snow accumulation during March was below normal.

SOIL MOISTURE

Soils in the mountain watersheds are moderately well wetted.

RESERVOIR STORAGE

Stored water supplies are 161 percent of normal and will furnish satisfactory supplies for the North Unit, Arnold, and Lone Pine Irrigation Districts. There is reason to expect some late—season shortages in the central Oregon, Tumalc, and Ochoco Irrigation Districts.

STREAMFLOW

Forecasts of April-September runoff have been revised sharply downward due to lack of normal snowfall during March. The main Deschutes River is forecast at 74 percent of normal and the Little Deschutes at 50 percent.

Squaw Creek and Tumalo Creek are forecast at 78 and 71 percent normal for the next six months. Inflow to Ochoco Reservoir is expected to be 43 percent normal. Trout Creek and other small streams will be extremely short this year. Crooked River will produce only about half the normal flow and will taper off much earlier than usual.

WATER MANAGEMENT

Farmers and ranchers of the central Oregon area can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with their Soil Conservation Service technician and County Agent.

Report prepared by ...

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STREAM OF AREA	FLOW F	PERIOD	DEMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REWARKS
Arnold Irrigation District Bear Creek Beaver Creek Camp Creek Central Oregon Irrigation District Crooked River Deschutes River Hay-Trout Creeks Lone Pine Irrigation District Mill Creek North Unit Irrigation District Ochoco Creek Ochoco Irrigation District Sisters Irrigation District Sisters Irrigation District Squaw Creek Irrigation District Swalley Ditch Tumalo Project Walker Basin Irrigation District			These fair and poor water supply outlooks will be improved only if unusually heavy precipitation is received in the April-June period.

STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

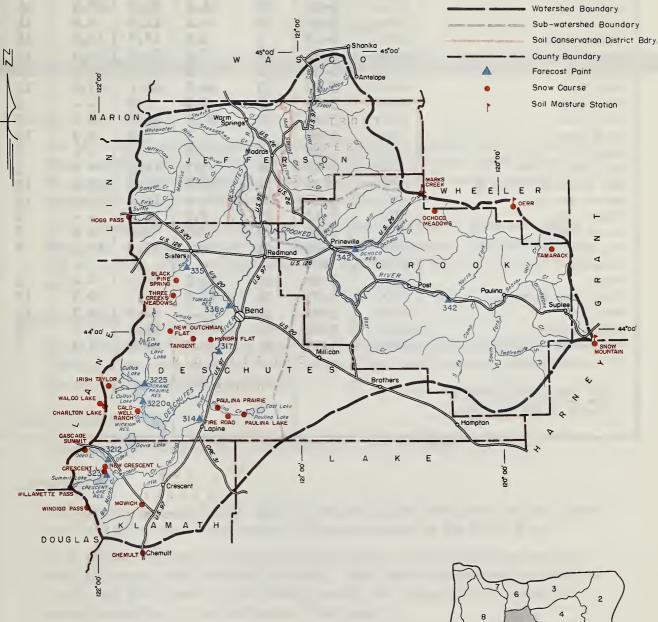
	FORECAST POINT	FORECAST			THIS YEAR AS PERCENT
NO.	NAME	THIS YEAR	PERIOD	NORMAL ^b	OF NORMAL
3220a	Crane Prairie Reservoir net inflow	75	April - Sept.	121	62
323	Crescent at Crescent Lake ^e	9.0	April - Sept.	21	43
342	Crooked near Post	60	April - Sept.	1249	48
317	Deschutes at Benham Falls ^e	380 255	April - Sept. April - July	511 346	74 74
3225	Deschutes below Snow Creek	36	April- Sept.	60	60
314	Deschutes, Little near Lapine ^e	45 40	April- Sept. April - July	90 79	50 51
3421	Ochoco Reservoir net inflow	12.0	April - Sept.	28	43
3212	Odell near Crescent	22	April - Sept.	29	76
335	Squaw near Sisters	38	April - Sept.	49	78
338 A	Tumalo near Bend ^e	34	April- Sept.	48	71

^{**}Assuming normal meteorological conditions. **1938-'52, 15 year period. **Number of years in 1938-'52 period. **Not scheduled. **Corrected to natural flow. **Aerial snow depth gage; water content estimated. **Report delayed. **1938-'39 excepted. **1938-'42 excepted

UPPER DESCHUTES, CROOKED WATERSHEDS

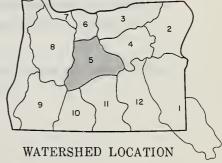


LEGEND



RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE	MEASU	RED (First of N	fonth)
NESERVOIN	CAPACITY	THIS YEAR	LAST YEAR	NORMAL b
Crane Prairie Crescent Lake	55.3 80.0	54.0 69.3	54.8 66.2	38.4 42.1
Ochoco Wickiup	46.0 200.0	31.7 200.0	38.3 196.8	28.3 112.3 i



SNOW		CURI	RENT INFORMAT	TION	PAST F	RECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONT	ENT (Inches)	YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Black Pine Spring	4600	3-27	8	2.5	4.3		1
Caldwell Ranch	4400	3-25	5	2.0	9.6	8.4	14
Cascade Summit	4880	3-26	47	16.2	32.2	32.2	15
Charitan Lake	5750	3-24	53	16.6	33.3	27.8	11
Chemult	4760	3-30	18	4.4	11.0	9.6	14
Crescent Lake	4760	3-19	9	3.8	17.7	10.0	15
Derr	5670	3-25	23	7.9	10.5	10.3	15
Fire Raad	5050	3-18	T	T	7.0		0
Hagg Pass	4755	3-27	73	26.8	46.1	43.8	14
Hungry Flat	4400	3-26	0	0.0	5.0		Ö
Irish-Taylar	5500	3-25	59	21.8	44.6		3
Marks Creek	4540	3-26	T	T	1.2	3.3	15
Mawich	4700	3-18	0	0.0	1.2		ő
New Crescent Lake	4800	3-19	20	7.1	18.1		1
New Dutchman Flat No. 2*	6400	3-26	82	33.5	61.9	53.1	12
Ochoco Meadows	5200	3-27	20	6.6	15.4	11.3	15
Paulina Lake	6330	3-18	27	9.6	24.1		ő
Paulina Prairie	4285	3-18	0	0.0	0.0		O
Snaw Mountain	6300	3-27	26	8.4	17.1	15.1	9
Tamarack	4800	d					ĺ
Tangent	5400	3-26	31	11.1	28.1		1
Three Creeks Meadaws	5600	3-27	26	11.0	25.1	20.9	15
Waldo Lake	5500	3-24	44	15.1	32.7	29.3	14
Willamette Pass	5600	3-20	61	21.8	46.0		4
Windiga Pass	5800	3-19	55	19.9	55.8	55.3	5
*New snow course replacing New Dutchman Flat; past record is for old course.	-						

WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September) period, for the Hood River and Wasco County areas has improved because of a near normal increase in the mountain snow-pack during March. Irrigated areas of the two counties can expect near average to only fair water supplies.

Some late season water shortages are a certainty but flows of Hood and White Rivers will approach average conditions in the early season. The Mile Creeks and Mill Creek will have reasonably good freshet flows but will taper off fairly early.

SNOW-COVER

Water content of the mountain snow-pack is only 61 percent of normal in spite of a nearly normal accumulation during March. The snow increase on some stations was greater than normal during March.

SOIL MOISTURE

Watershed soils are generally well wetted and will not deter streamflow.

STREAMFLOW

Forecasts of April-September runoff for the Hood River have been revised upward to 83 and 85 percent normal and to 79 percent normal on the White River.

Rock, Gate, and Badger Creeks will have nearly normal freshet flows but will taper off several weeks earlier than usual. This also is the outlook for the Mile Creeks and Mill Creek. Clear Creek, serving the Juniper Flat area also can expect streamflow to taper off earlier than usual.

The above outlook assumes normal rainfall during the April-June period. If the rains do not occur, streamflow will be less than predicted.

Report prepared by:

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STREAM or AREA	FLOW P	ERIOD	DEMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REMARKS
Aldridge Ditch	Average	Fair	
Badger Creek	Average	Poor	
Dee Irrigation District	Average	Fair	
Eost Fark Irrigation District	Average	Fair	
Formers Irrigation District	Average	Fair	
Glacier Irrigation District	Average	Fair	
Haod River			
Irrigation District	Average	Fair	
Juniper Flat	Average	Poor	
Middle Fork Irrigation District	Average	Fair	
Mile Creeks	Average	Poor	
Mill Creek	Average	Poor	
Mount Hood Irrigatian District	Average	Fair	
Rack - Gote - Threemile Creeks	Average	Poor	
Tygh Creek	Average	Poor	
White River	Average	Fair	
	35 4.6		

STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

NO.	FORECAST POINT NAME	FORECAST THIS YEAR	FORECAST PERIOD	NORMAL ^b	THIS YEAR AS PERCENT OF NORMAL
437	Hood near Hood River ^e	255 215	April-Sept. April-July	306 260	83 83
438	Haad, West Fark near Dee	125 105	April-Sept. April-July	147 127	85 83
3613	White below Tygh Valley	120 105	April-Sept. April-July	152 135	79 78

SNOW	CURI	RENT INFORMAT	TION	PAST R	ECORD		
SNOW COURSE		DATE OF	DATE OF SNOW DEPTH	WATER CONTENT	WATER CONT	WATER CONTENT (Inches)	
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Braaks Meadows Clear Lake Greenpoint Reservair Phlox Paint Red Hill Still Creek Tilly Jane	4300 3800 3400 5600 4400 3700 6000	3-30 3-27 3-26 3-27 3-22 3-28 3-22	32 19 26 108 73 42 96	9.8 7.4 11.2 45.0 28.1 17.7 33.7	11.1 5.7 13.0 76.1 42.3 20.5 52.9	12.9 14.2 61.5 66.3 24.0 55.0	15 15 2 14 5 15

^{*}Assuming normal meteorological conditions. * 1938 - '52,15 year period. *Number of years in 1938 - '52 period. *Not scheduled **Corrected to natural flow. *Aerial snow depth gage; water content estimated. ** Report delayed.

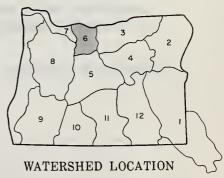
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS





LEGEND

Wotershed Boundory
Sub-wotershed Boundory
Soil Conservation District Bdry.
County Boundory
Forecast Point
Snow Course



WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS **OREGON**

as of April 1, 1959

II S DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 water supply outlook for the spring and summer flow of the Columbia River is forecast to be just normal. There were no significant changes during March in snow water content in the northern portion of the Columbia Basin, but throughout the southern part, snowfall was below normal.

SNOW-COVER

The high watersheds of the Columbia Basin in Canada and the northern portion of the United States had almost normal snowfall during the month of March. The southern half of the Basin in Oregon, Idaho and western Wyoming had warm temperatures at high elevations and light snowfall. The general snow-melt in the middle and lower elevations of the mountains has already started. The snowline on the south slopes continues to recede much earlier than under normal spring conditions.

SOIL MOISTURE

Soil moisture conditions beneath the snow are still relatively dry at high elevations. The warm dry month of March actually reduced soil moisture status below the snowline at the lower elevations. The dry soils under the snow-pack will decrease the total flow from the snow water.

Valley and farmland soil moisture conditions are also low, which may require earlier irrigation during the 1959 season. This condition is a factor in reducing a peak flow of the Columbia River near The Dalles, and is especially significant during dry spring seasons with relatively low volume flows forecast.

STREAMFLOW

Assuming normal meteorological conditions for the balance of the water year, flow of the Columbia River near The Dalles for April-September is forecast at 99 percent of normal (1938-52).

The general trend at this time is for an early peak flow, coupled with streamflow receding early in the summer season.

Report prepared by

W T Frost and Mones Barton U. S Department of Agriculture, Soil Conservation Service 209 S. W Fifth Avenue, Partland, Oregon M W Nelson

U.S. Decortment of Agriculture, Soil Conservation Service PO Box 2709 Boise , Idoho

STREAMFLOW FORECASTS a (1,000 Ac. Ft.)

FORECAST POINT	FORECAST THIS YEAR	FORE CAST PERIOD	NORMAL b	THIS YEAR AS PERCENT OF NORMAL
Columbia at The Dalles	96,500 66,500 d	AprSept. AprJune May-June	97,000 65,900 51,800	99 101

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STR APRSEPT.	(1.00		PEAK ^e (1,000 c.f.s.)	DATE
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952	103,400 80,800 77,400 69,100 90,300 115,000 61,900 81,500 108,000 100,300 130,500 95,700 120,600 113,000 107,700	72,600 53,300 52,100 43,500 58,100 75,300 39,200 54,600 75,400 70,000 94,600 71,400 74,700 75,600 77,500	56,700 40,500 38,900 33,500 44,500 52,400 32,100 47,300 59,600 56,800 81,900 56,000 61,200 59,100 57,300 51,800	605 387 369 272 428 541 326 505 581 536 999 622 744 597 557	May 31 May 21 June 5 June 11 June 18 June 21 June 19 June 8 May 30 May 11 May 31 May 18 June 25 May 26 May 28
1953 1954 1955 1956 1957 1958	100,600 119,500 99,500 131,200 115,200 97,696	64,900 70,500 58,300 97,100 79,200 71,953	55,800 59,300 50,300 75,800 67,200 58,644	609 561 545 815 700 593	June 17 May 23 June 26 June 3 May 22 May 31

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria) f

	OWER OCCUMENT RIVER 12000 CINCLO (With C.O. and at Astoria / -							
VANCOUVER g	FLOW AT			DRAINAGE	DISTRICT F	PUMPHOUSE		
GAGE	THE DALLES	SANDY	SAUVIE IS.	SCAPPOOSE	DEER IS.	RAINIER	BEAVER	WOODSON
(WEATHER BU.)	(1000 cfs)				RIVER MI.			
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 34 (1894)	1,290	42.2 41.3	35.3 34.4	34.4 33.4	29 .6 28.5	22.9 22.0	18.3 17.5	16.2 15.5
33	1,220 1,150 1,090	40.4 39.5	33.3	32.3 31.2	27.5 26.5	21.0	16.7	14.8
32 31	1,090 1,030	39.5 38.5	32.2 31.2	$\frac{31.2}{30.1}$	26.5 25.5	20.0 19.1	15.9 15.1	14.1 13.4
30 (1948) 29 (1876)	970 920	37.4 36.2	30.1 29.1	29.0 28.1	24.6 23.9	18.3 17.7	14.4 13.8	12.7 12.1
28	920 870	35.1	28.1	27.3	23.3	17.2	13.3	11.6
27 26	820 770	33.8 32.5	$\begin{smallmatrix}27.1\\26.1\end{smallmatrix}$	26.4 25.3	22.4 21.4	16.6 15.8	12.8 12.3	11.2 10.8
(1933)· 25 (1950)	7 30	31.8	25.1	24.1	20.4	15.1	11.9	10.5
24 (1957) 23	690 650	30.3 29.5	24.0 22.9	23.0 21.9	19.5 18.7	14.5 13.9	11.6 11.3	10.3 10.1
22 (1953)	610	28.6	21.9	20.8	17.6	13.3	11.0	9.9
21	570	27.6	21.0	19.8	16.6	12.7	10.7	9.7
20 19	540 510	26.5 25.5	$\begin{smallmatrix}20.1\\19.2\end{smallmatrix}$	18.9 18.0	15.7 15.0	12.2 11.8	10.3 10.0	9.5 9.3
18 17	480	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17 16	450 430	$23.4 \\ 22.4$	17.4 16.5	16.4 15.5	13.7 13.0	$\frac{11.0}{10.5}$	9.6 9.3	8.9 8.7
15	400	21.4	15.5	14.4	12.0	9.8	8.8	8.3

^aAssuming normal meteorological conditions.

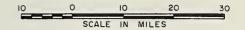
^b1938-'52, 15 year period.

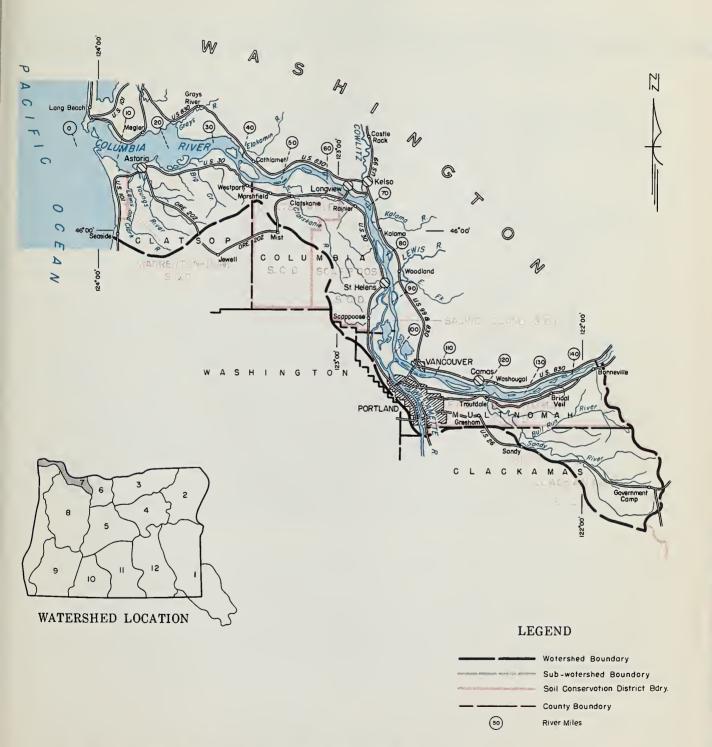
^cObserved flow corrected for storage in F.D.R., Kootenai, Pend Oreille, Flathead, Hungry florse, Lake Chelan, Coeur d'Alene and Grand Coulee Equalizer.

^dNot scheduled.

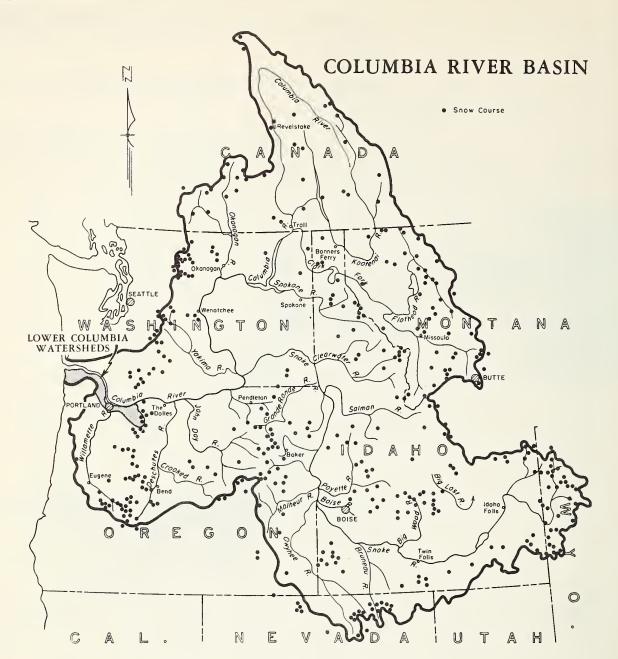
^eObserved peak

LOWER COLUMBIA WATERSHEDS





fBased on Corps of Engineers automatic water stage recorder data. BVancouver Weather Bureau gage zero is 2.64' above M.S.L. All other readings are in feet above M.S.L.



WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook in the Willamette Valley during the April-September period remains only fair to average with poor late season water supplies anticipated. The mountain snow-pack remains below normal, although it increased in a normal fashion during March.

SNOW-COVER

Water content of the mountain snow-pack is only 61 percent of normal and 63 percent of April 1, 1958. The effective snow line is now at 3200 to 3500 feet above sea level.

SOIL MOISTURE

The mountain soil mantle under the snow is satisfactorily wet.

RESERVOIR STORAGE

Storage in the five multiple purpose reservoirs operated by the Corps of Army Engineers is slightly above normal at 118 percent.

STREAMFLOW

Forecasts of April-September runoff have been revised only slightly from those given last month. They indicate flow of the Clackamas at 80 percent; the North Santian, 73; South Santiam, 70; McKenzie, 78; Middle Fork Willamette, 71; Row River, 79; and the Willamette at Salem, 85.

Flow of the streams heading in the lower ridges of the Cascade Range such as the Molalla, Calapooya and Pudding River will be less than indicated for the larger streams.

WATER MANAGEMENT

Farmers in the Willamette Valley can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with your Soil Conservation Service technician and County Agent.

Report prepared by .

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209 S.W. Fifth Avenue, Portland, Oregon

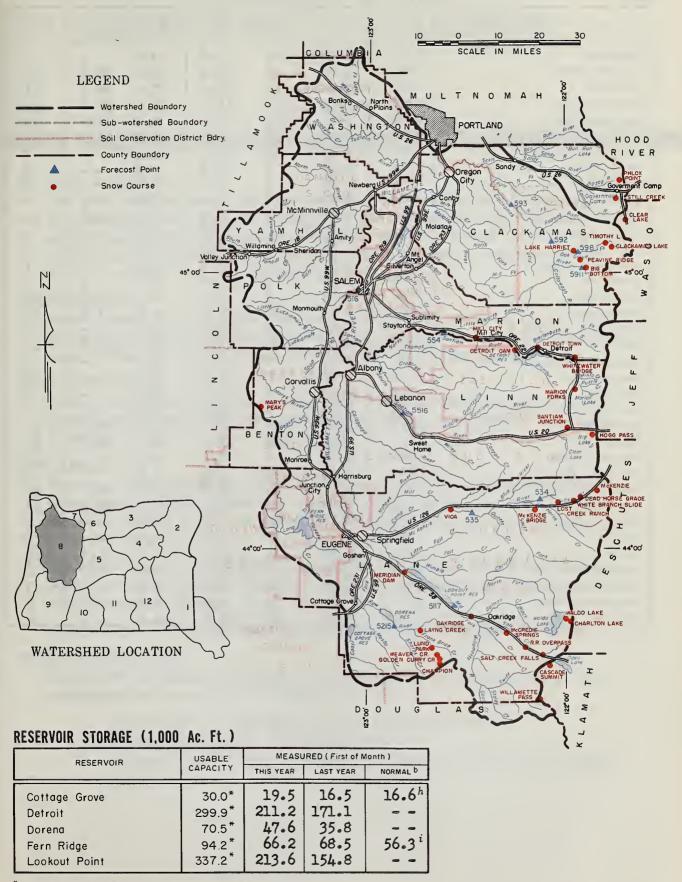
STREAM or AREA	FLOW P	ERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REWARKS
Calapooya	Fair	Poor	
Clackamas	Average	Fair	
McKenzie	Average	Fair	
Molialla	Fair	Poor	
Santiam, North	Average	Fair	
Santiam, South	Fair	Fair	
Willamette, Coast Fork	Average	Fair	
Willamette, Middle Fork	Average	Fair	

STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

NO.	FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	NORMAL b	THIS YEAR AS PERCENT OF NORMAL
NO.	NAME			1	
5911	Clackamas at Big Bottom	128	April-Sept.	164	78
		105	April-July	133	79
593	Clackamas near Cazadero	640	April-Sept.	777	82
		550	April-July	669	82
592	Clackamas above Three Lynx	480	April-Sept.	599	80
		405	April-July	507	80
534	McKenzie at Mckenzie Bridge	450	April-Sept.	565	80
		345	April-July	430	80
535	McKenzie near Vida	935	April-Sept.	1195	78
		760	April-July	978	78
598	Oak Grove Fork above Power Intake	150	April - Sept.	186	81
		117	April - July	145	81
5215	Row near Dorena	80	April - Sept.	101	79
		76	April-July	96	79
554	Santiam, North at Mehama ^e	615	April-Sept.	842	73
		545	April-July	748	73
5516	Santiam, South at Waterloo	390	April-Sept.	558	70
		370	April-July	525	70
5117	Willamette, Mid. Fork below North Fork	565	April-Sept.	798	71
	near Oakridge	505	April-July	705	72
516	Willamette at Salem e	3700	April-Sept.	4355	85
		3300	April-July	3863	85

 $^{\circ}$ Assuming narmal meteoralogical canditions. $^{\circ}$ 1938-'52,15 year period. $^{\circ}$ Number of years in 1938-'52 period. $^{\circ}$ Nat scheduled. $^{\circ}$ Corrected to natural flaw. † Aerial snow depth gage; water content estimated. $^{\circ}$ Report delayed. $^{\circ}$ 1938-'42 excepted $^{\circ}$ 1938-'41 excepted.

WILLAMETTE WATERSHEDS



^{*} Multiple purpose reservoir-space reserved primarily for flood runoff.

SNOW	CURRENT INFORMATION PAST RECORD						
SNOW COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONT	ENT (Inches)	YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Big Bottom	2118	3-30	0	0.0	0.0		2
Coscade Summit	4880	3-26	47	16.2	32.2	32.2	15
Champion	4500	3-26	46	17.4	27.9	28.3	14
Charlton Lake	5750	3-24	53	16.6	33.3	27.8	11
Clackomas Lake	3400	3-27	14	5.5	8.1	15.7	12
Clear Loke	3800	3-27	19	7.4	5.7	14.2	15
Dead Horse Grade	3800	3-31	24	10.1	11.4		
Detroit Town	1600	3-27	0	0.0	0.0		3 2 2 3
Detroit Dom	1580	3-27	0	0.0	0.0		2
Golden Curry Creek	3136	3-26	T	T	0.0		3
Hogg Poss	4755	3-27	73	26.8	46.1	43.8	14
Lake Horriet	3400	3-30	0	0.0	0.0		2
Loyng Creek	1200	3 - 26	0	0.0	0.0		3
Lost Creek Ranch	1746	3-31	0	0.0	0.0		3
Lund Park	1740	3-26	0	0.0	0.0		3
Marion Forks	2730	3-27	9	3.5	8.3	13.6	12
Morys Peak	3620	3-31	30	13.3	4.0	11.6	12
McCredie Springs	2120	3-26	0	0.0	0.0		3
McKenzie	4800	3-31	82	29.0	48.5	43.7	13
McKenzie Bridge	1372	3-31	0	0.0	0.0		
Meridian Dam	750	3-26	0	0.0	0.0		3
Mill City	826	3-27	0	0.0	0.0		3
Oakridge	1310	3-26	0	0.0	0.0		2 3 3 3
Peovine Ridge	3500	3-30	35	12.6	13.6	19.8	15
Phlox Point	5600	3-27	108	45.0	76.1	61.5	14
Railroad Overpass	2750	3-26	0	0.0	0.0		3
Salt Creek Falls	4000	3-26	22	8.4	8.2		3
Santiam Junction	3990	3-27	31	11.7	20.7	25.3	12
Still Creek	3700	3-28	42	17.7	20.5	24.0	15
Timothy Lake	3295	3-30	30	9.7	12.5		ő
Vido	800	3-31	0	0.0	0.0		2
Waldo Lake	5500	3-24	44	15.1	32.7	29.3	14
Weaver Creek	2440	3-26	Ö	0.0	0.0		2
White Branch Slide	2800	3-31	0	0.0	0.0		3
Whitewoter Bridge	2175	3-27	0	0.0	0.0		3
Willamette Pass	5600	3-20	67	21.8	16.0		1

WATER SUPPLY OUTLOOK ROGUE, UMPQUA WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period) for the Rogue-Umpqua area has not improved during March and remains only fair with late-season shortages to be expected in most areas. Reservoired water will be sufficient for most irrigation districts to serve their lands adequately except for the tailend of the season when there will be shortages.

SNOW-COVER

Water content of the mountain snow-pack is now only 59 percent of normal. Snow accumulation during March was below normal throughout the southern Oregon water-sheds, making downward revisions of streamflow forecasts necessary.

RESERVOIR STORAGE

Stored water in local irrigation reservoirs is 158 percent normal due principally to substantial carry-over from last season. Howard Prairie now has 8,700 acre feet in storage.

STREAMFLOW

Forecast of April-September runoff for the Rogue at Raygold and Grants Pass are 69 percent of normal. Grants Pass Irrigation District can expect canal alternation by about August 1 to 15. The Applegate and Illinois Rivers are forecast at 95 percent of normal.

The North Umpqua is forecast at 85 percent normal for the 6 months April through September and forecasts for Fourmile Lake, Fish Lake, and Hyatt Lake are 50, 44 and 50 percent of normal.

Flow of other small streams heading in low elevations will be short this season.

WATER MANAGEMENT

Farmers and orchardists in the Rogue-Umpqua watersheds can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with their Soil Conservation Service technician and County Agent.

Report prepared by

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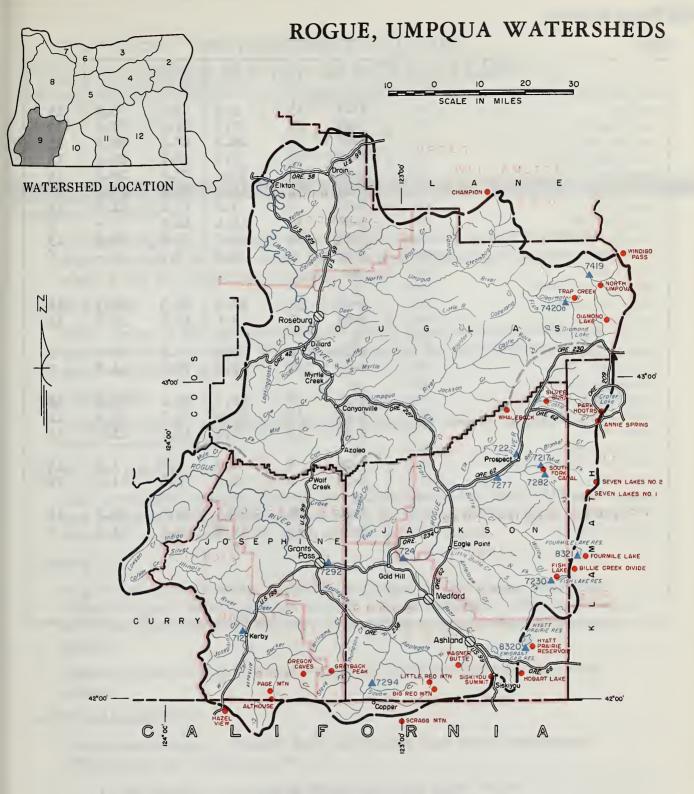
STREAM or AREA	FLOW F	PERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	n EMARKS
Althouse Creek	Average	Fair	
Applegate River, Big	Average	Average	
Applegate River, Little	Average	Fair	
Ashland Creek	Average	Fair	
Butte Creek, Little	Fair	Fair	
Cow Creek	Fair	Poor	
Deer Creek	Average	Fair	
Eagle Point Irrigation District	Average	Average	
Elk Creek	Fair	Poor	
Emigrant Creek (above Reservoir)	Average	Fair	
Evans Creek	Fair	Poor	
Gold Hill Irrigation District	Average	Average	(Come) eltermetter :
Grants Pass Irrigation District	Average	Fair	Canal alternation is
Grave Creek	Fair	Poor	probable by August 1-15
Ilinois River, East Fork	Average	Average	
Ilinois River, West Fork	Average	Average	
Medford Irrigation District	Average	Fair	
Veil Creek	Average	Fair	
Red Blanket Creek	Average	Fair	
Rogue River	Average	Fair	
Rogue River Valley Irrigation District	Average	Fair	
Sucker Creek	Average	Fair	
Table Rock Irrigation District	Average	Fair	
Talent Irrigation District	Average	Fair	
Thompson Creek	Average	Fair	
Nagner Creek	Average	Fair	
Williams Creek	Average	Fair	
			`

STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

NO.	FORECAST POINT	FORECAST THIS YEAR	FORECAST PERIOD	NORMAL ^b	THIS YEAR AS PERCENT OF NORMAL
7294	Applegate near Copper	110	April – Sept.	116 ^h	95
7420A	Clearwater above Trap Creek ^e	55	April-Sept.	64	86
8321	Fourmile Lake net inflowe	3.5	April – Sept.	7.0	50
8320	Hyatt Reservoir net inflowe	3.0	April – Sept.	6.0	50
712	Illinois River near Kerby ^e	170	April – Sept.	181	94
7230	Little Butte, North Fork below Fish Lake ^e	6.5	April – Sept.	14.9	44
722	Rogue above Prospect	220	April – Sept.	316	70
		185	April – July	265	70
7217	Rogue, Middle Fork near Prospect ^e		April – Sept.	74	
	STATION DISCONTI	NUED	April – July	58	
7282	Rogue, South Fork near Prospect ^e	51	April – Sept.	76	67
		44	April - July	65	68
7277	Rogue below South Fork	480	April – Sept.	680	71
		390	April – July	553	71
724	Rogue at Raygold near Central Point	620	April – Sept.	905	69
		525	April – July	760	69
7292	Rogue at Grants Pass	590	April-Sept.	852	69
7419	Umpqua, North Fork below Lake Creek ^e	140	April – Sept.	164	85

^{**}Assuming normal meteorological conditions *** 1938-'52, 15 year period. **Number of years in 1938-'52 period. **Not scheduled. ***Corrected to natural flow. **

Aerial snow depth gage; water content estimated. *Report delayed. ***1938-'39 excepted.



LEGEND

Sub-wotershed Boundary
Soil Conservation District Bdry.
County Boundary
Forecast Point

Snow Course

RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE	MEASU	lonth)	
KESERVOIR	CAPACITY	THIS YEAR	LAST YEAR	NORMAL b
Emigrant Gap	8.3	6.1	7.7	8.0
Fish Lake	7.8	7.8	6.7	. 5.0
Fourmile Lake	16.1	15.6	11.2	7.5
Hyatt Prairie	16.1	13.5	13.6	6.7
Howard Prairie	60.0	8.7		

0W		CURF	ENT INFORMAT		PAST R	ECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONT	ENT (Inches)	YEARS O
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL	RECORD
Althouse	4530	3-25	15	5.3	3.2	6.8	15
Annie Spring	6018	3-29	82	31.5	54.0	47.4	15
Big Red Mountain	6500	3-22	61	26.2	42.1	28.6	15
Billie Creek Divide	5300	3-29	28	9.9	32.1	23.4	14
Chompion	4500	3-26	46	17.4	27.9	28.3	14
Diamond Lake	5315	3-23	32	11.9	25.2	23.0	15
Fish Loke	4865	3-30	9	3.2	11.0	11.7	14
Fourmile Loke	6000	3-29	38	11.4	40.8		1
Graybock Peok	6000	3-29	58	24.7	35.9	25.4	15
Hozel View	2500	3-25	0	0.0	0.0		0
Hobort Loke	5010	g					
Hyatt Prairie Reservoir	4900	g					
Little Red Mountoin	6500	3-21	51	22.2	36.3	22.3	15
North Umpquo	4215	3-25	8	2.6	13.6	13.2	14
Oregon Coves	4000	g					
Page Mountain	4045	3-25	8	2.6	1.6		0
Park Heodquorters	6450	3-29	105	40.9	72.7	64.8	9
Scragg Mountain	6200	g	1				
Seven Lokes No. I	6800	3-25	87	34.2	80.4	54.8	14
Seven Lakes No 2	6200	3-27	62	22.8	59.1	40.8	14
Silver Burn	3720	3-26	12	3.8	14.0	11.1	15
Siskiyou Summit	4630	g	1				
South Fork Conol	3500	3-26	0	0.0	0.0	1.6	15
Trap Creek	3800	3-25	0	0.0	0.0	11.4	12
Wogner Butte	6900	g				•	
Wholebock	5140	3-22	59	20.5	41.5	35.1	14
Windigo Poss	5800	3-19	55	19.9	55.8	55.3	5

WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OBEGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 irrigation water supply outlook (April-September period) for Klamath Basin continues to be below normal but because of satisfactory stored water supplies, it will be a satisfactory irrigation season.

SNOW-COVER

Water content of the mountain snow-pack is only 55 percent normal with snow accumulation during March falling below average. The usual low-elevation snow is completely missing.

SOIL MOISTURE

Watershed soils are only partially wet and will require some of the snow-melt water to prime them.

RESERVOIR STORAGE

Total water stored in Upper Klamath Lake, Gerber and Clear Lake is 111 percent normal and will provide adequate water for lands served from these sources. Most small reservoirs and stock ponds are only partially filled.

STREAMFLOW

Forecasts of April-September runoff for the Sprague and Williamson Rivers and inflow to Upper Klamath Lake are set at 90 percent of normal. Inflow to Gerber and Clear Lake Reservoirs, however, is expected to be only about 25 percent normal.

Smaller streams heading in low elevations will have extremely short flows this season.

WATER MANAGEMENT

Farmers and ranchers in Klamath Basin can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with their Soil Conservation Service technician and County Agent.

Report prepared by

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STREAM OF AREA	FLOW P	ERIOD	REMARKS
OTTERM OF AREA	SPRING SEASON	LATE SEASON	NEWARKS
Ft. Klamath Valley Lost River (Clear Lake) Lost River (Gerber) Lost River (Willow Reservoir) Sprague River Upper Klamath Lake Williamson River	Average Average Fair Average Average Average Average	Fair Average Average Poor Fair Average Average	Unusually heavy rains during the April-July period could improve these outlooks.
	-		

STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

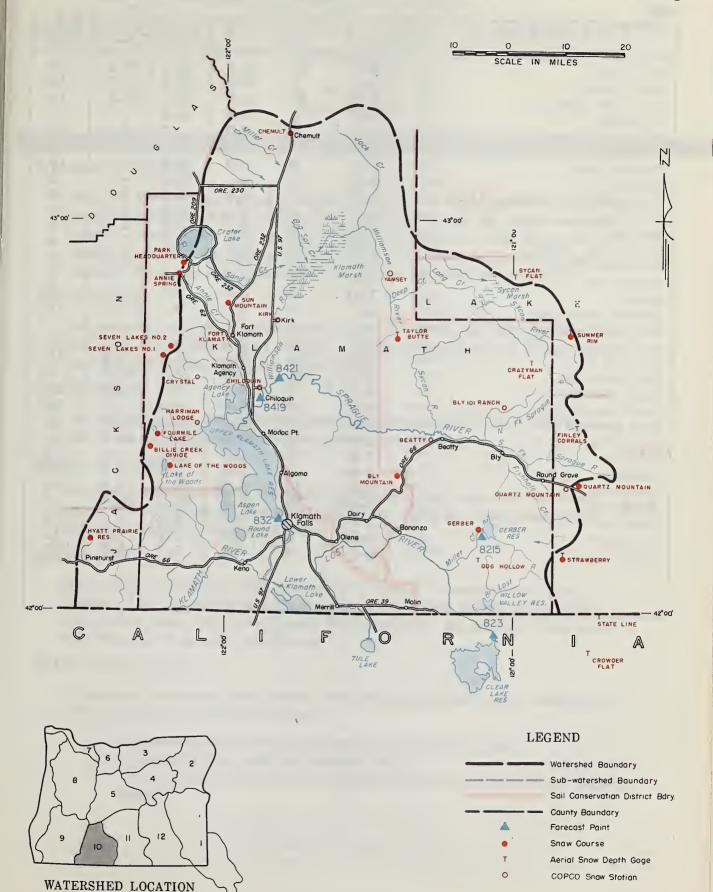
	FORECAST POINT	FORECAST	FORECAST	NORMAL	THIS YEAR
NO.	NAME '	THIS YEAR	PERIOD	NORWAL	AS PERCENT OF NORMAL
823	Clear Lake Reservoir net ınflow ^h	13 25	April - Sept. March-July	49 86	27 29
8215	Gerber Reservoir net inflow ^h	6	April - Sept. March-July	24 42	25 26
8421	Sprague near Chiloquin	225	April - Sept.	253	89
832	Upper Klamath Lake net inflow ^h	475 380	April-Sept April-July	526 424	90 90
8419	Williamson below Sprague River	365 305	April-Sept. April-July	406 340	90 90

RESERVOIR STORAGE (1,000 Ac. Ft.)

RESERVOIR	USABLE	MEASU	MEASURED (First of Month)				
NESERVOIN	CAPACITY	THIS YEAR	LAST YEAR	NORMAL b			
Clear Lake Gerber Upper Klamath Lake	440.2 ¹ 94.0 584.0	287.4 55.1 468.0	414.1 86.6 529.6	236.6 ^j 47.6 ^j 448.2			

^{**}Assuming normal meteorological conditions. $^{\text{b}}$ 1938 - '52, 15 year period. $^{\text{c}}$ Number of years in 1938 - '52 period. $^{\text{d}}$ Nat scheduled. $^{\text{c}}$ Corrected to notural flow. $^{\text{f}}$ Aerial snow depth gage; water content estimated. $^{\text{g}}$ Report delayed. $^{\text{h}}$ From COPCO or USBR records of inflow $^{\text{f}}$ Flashboards increase capacity to 513.0. $^{\text{f}}$ 1938 excepted.

KLAMATH WATERSHEDS



WONS		CURI	RENT INFORMAT	ION	PAST R	ECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER	WATER CONT	ENT (Inches)	YEARS OF C
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Annie Spring	6018	3-29	82	31.5	54.0	47.4	15
Beatty (Capco)	4300	4-1	0	0.0	0.0	0.0	14
Billie Creek Divide	5300	3-29	28	9.9	32.1	23.4	14
Bly Mauntain	5090	3-25	4	1.3	8.6		j
Bly IOI Ranch (Copco)	4800	4-1	0	0.0	I	0.1	13
Chemult	4760	3-30	18	4.4	11.0	9.6	14
Chiloquin (Capca)	4187	4-1	0	0.0	0.0	0.1	15
Crazyman Flat ^f	6100	3-27	12	4.1	14.4		0
Crawder Flat ^f	5200	3-27	0	0.0	1.5	0.1	12
Crystal (Capca)	4200	4-1	0	0.0	8.0	5.6	15
Dag Hailaw ^f	4900	3-27	0	0.0	0.0		0
Finley Carrals ^f	6000	3-27	20	6.8	25.1		0
Fart Klamath (Copco)	4150	4-1	0	0.0	T	1.3	15
Faurmile Lake	6000	3-29	38	11.4	40.8		1
Gerber	4850	3-31	0	0.0	0.5		2
Harriman Lodge (Copca)	4200	4-1	0	0.0	0.0	1.4	14
Hyatt Prairie Reservair	4900	g					
Kirk (Capco)	4533	4-1	0	0.0	6.1	1.3	12
Lake af the Waods	4960	3-27	16	6.4	13.2	9.9	15
Park Headquarters	6450	3-29	105	40.9	72.7	64.8	9
Quartz Mauntain	5320	3-30	0	0.0	7.7	4.7	15
Quartz Mauntain (Capco)	5504	3-30	10	3.6	9.2	5.1	14
Seven Lakes Na. I	6800	3-25	87	34.2	80.4	54.8	14
Seven Lakes Na. 2	6200	3-27	62	22.8	59.1	40.8	14
State Line ^f	5750	3-27	12	4.1	13.7		Ó
Strawberry	5600	3-28	10	2.9	3.3	6.7	12
Summer Rim	7200	3-28	30	9.5	23.2	17.9	14
Sun Mauntain	5350	3-20	36	12.8	38.1	28.3	15
Sycan Flat ^f	5500	3-27	0	0.0	8.4		0
Taylar Butte	5100	3-23	0	0.0	3.7	3.9	15
Yamsey (Capco)	4600	4-1	0	0.0	0.5	0.7	15
				,			

WATER SUPPLY OUTLOOK LAKE COUNTY, GOOSE LAKE WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

The 1959 water supply outlook in Lake County for the April-September irrigation season is extremely poor except for those lands served from the larger reservoirs. Lakeview Water Users Association will have a satisfactory water supply for a normal operation. All other streams in the area will have only a fair to poor supply in the spring season and a very poor water supply in the summer.

SNOW-COVER

The mountain snow-pack has decreased during the month and in the process, has produced only moderate flows of water. Water content of snow is 55 percent of normal and less than 25 percent of last year.

SOIL MOISTURE

The soils under the mountain snow-pack have become wetter due to melting snow and in the process have reduced the resultant streamflow.

RESERVOIR STORAGE

Both Cottonwood and Drew Reservoirs are at near normal levels for this time of year. It is very doubtful that either will fill to capacity. Many stock ponds and small reservoirs are short of water.

STREAMFLOW

Below normal irrigation season streamflow is forecast for major Lake County streams. The Chewaucan River is forecast for 55 percent normal during April-June; Deep Creek, 40; Honey Creek, 58; Twentymile, 52; and Drew Reservoir net inflow for 47 percent, April-July.

WATER MANAGEMENT

Farmers and ranchers in Lake County areas can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with their Soil Conservation Service technician and County Agent.

Repart prepared by:

W.T. Frast and Manes Barton
U.S. Department of Agriculture, Soil Conservation Service
209 S.W. Fifth Avenue, Partland, Oregon

WATER SUPPLY OUTLOOK °

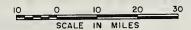
STREAM or AREA	FLOW P	ERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REMARKS
Chewaucan River	Fair	Poor	Much above normal rains
Crooked Creek	Fair	Poor	will be needed during
Deep Creek	Fair	Poor	the April-June period to
Dry Creek	Poor	Poor	improve these extremely
East Side Goose Lake	Poor	Poor	short water supplies.
Guano Lake	Poor	Poor	
Honey Creek	Fair	Poor	
Lakeview Water Users Association	Average	Fair	
Rock Creek	Poor	Poor	40 01 010
Silver - Buck Creeks	Fair	Poor	
Summer Lake	Fair	Poor	1
Thomas Creek	Fair	Poor	
Twentymile Creek	Fair	Poor	
Warner Lakes	Fair	Poor	

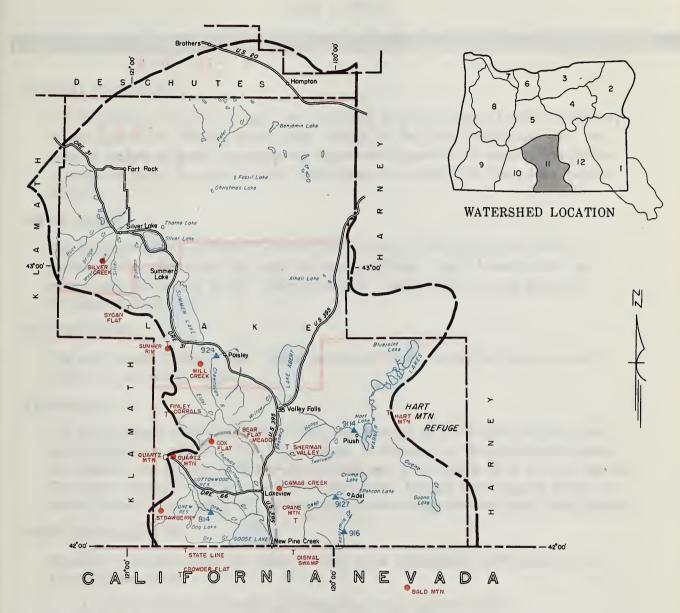
STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

FORECAST POINT		FORECAST THIS YEAR	FORECAST PERIOD	NORMAL ^b	THIS YEAR AS PERCENT
NO.	NAME	THIS TEAR	PERIOD		OF NORMAL
924	Chewaucan near Paisley	40	April — June	73	55
9127	Deep above Adel	40	April — June	67	60
814	Drew Reservoir net inflow	14	April — July	30 h	47
		d	March — July	44 ^h	
9114	Honey near Plush	9.0	April — June	15.6 ⁱ	58
916	Twentymile near Adel	11.0	April — June	21 ,	52

SNOW		CURI	RENT INFORMAT	TION	PAST F	RECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONT	ENT (Inches)	YEARS OF
NAME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Bald Mountain	6720	3-31	2	1.2	7.7	3.4	13
Bear Flat Meadow ^f	5900	3-27	22	7.5	16.7		0
Camas Creek	5720	3-29	11	3.0	15.0	10.9	14
Cox Flat ^f	5750	3-27	2	0.7	10.6		0
Crane Mountain ^f	6020	3-25	4	1.4	9.1		0
Crowder Flat ^f	5200	3-27	0	0.0	1.5	0.1	12
Dismal Swamp ^f (Calif.)	7000	3-26	21	7.1	36.5		0
Finley Corrals ^f	6000	3-27	20	6.8	25.1		0
Hart Mountain ^f	6350	3-25	0	0.0	1.5	1.7	10
Mill Creek	6200	3-29	14	4.4	11.3	6.9	14
Quartz Mountain (COPCO)	5504	3-30	10	3.6	9.2	5.1	14
Quartz Mountain	5320	3-30	0	0.0	7.7	4.7	15
Sherman Valley ^f	6600	3-26	24	8.2	18.2		0
Silver Creek	4900	3-26	0	0.0	T	1.1	12
State Line ^f	5750	3-27	12	4.1	13.7		0
Strawberry	5600	3-28	10	2.9	3.3	6.7	12
Summer Rim	7200	3-28	30	9.5	23.2	17.9	14
Sycan Flat ^f	5500	3-27	0	0.0	8.4		Ó

LAKE COUNTY, GOOSE LAKE WATERSHEDS





RESERVOIR STORAGE (1,000 Ac. Ft.)

				NO. 1 t. /	RESERVOIR STORAGE (1,000
CAPACITY THIS YEAR LAST YEAR N)	IRED (First of Month)	MEASU	USABLE	BESERVOIR
41 30 03	ORMAL b	LAST YEAR NORMA	THIS YEAR	CAPACITY	KESEKVOJK
		2.1 1.4 62.1 48.8	1.8 47.4	4.1 62.5	Cottonwood Drew

LEGEND





WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

as of April 1, 1959

U.S.DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

GENERAL OUTLOOK

An extremely poor water supply for the 1959 irrigation season (April-September) is anticipated for Harney Basin lands. Much of the lower elevation snow has already melted without producing any appreciable quantity of water. Streamflow is expected to be the poorest since 1944 when near record-low flows were experienced.

SNOW-COVER

The snow-pack has increased in water content only in the highest elevations of Harney Basin. Elsewhere the snow has begun melting. April 1 snow water content is only 48 percent of the 1938-52 normal. Snow conditions are generally the poorest since 1947.

SOIL MOISTURE

The soil is only partially wet. These soils have taken up much of the snow-melt which has occurred to date.

STREAMFLOW

The three largest streams of Harney Basin are forecast to have much below normal April-September runoff. The Silvies River is forecast at 26 percent of normal; the Donner und Blitzen at 56 percent normal; and Trout Creek at 21 percent normal. The other streams in the basin will have only a fair to poor water supply during the spring season. The supply will be extremely short during the late spring and summer.

WATER MANAGEMENT

Ranchers in Harney Basin can improve their water management efficiency by the following practices:

- 1. By cleaning and repairing ditches and using shorter "runs".
- 2. By concentrating water on the better soils.
- 3. By consulting with your Soil Conservation Service technician and County Agent.

Report prepared by:

W. T. Frast and Manes Bartan
U. S. Department at Agriculture, Soil Conservation Service
209 S. W. Fitth Avenue, Partland, Oregon

WATER SUPPLY OUTLOOK °

STREAM or AREA	FLOW P	ERIOD	REMARKS
STREAM OF AREA	SPRING SEASON	LATE SEASON	REMARKS
Catlow Valley	Fair	Poor	
Cow Creek	Poor	Poor	
Donner und Blitzen River	Fair	Poor	
Mill - Coffeepot Creeks	Poor	Poor	
Rattlesnake Creek	Poor	Poor	
Silver Creek	Fair	Poor	
Silvies River	Fair	Poor	
Soldier - Prather Creek	Poor	Poor	
Trout Creek	Poor	Poor	
Whitehorse Creek	Poor	Poor	

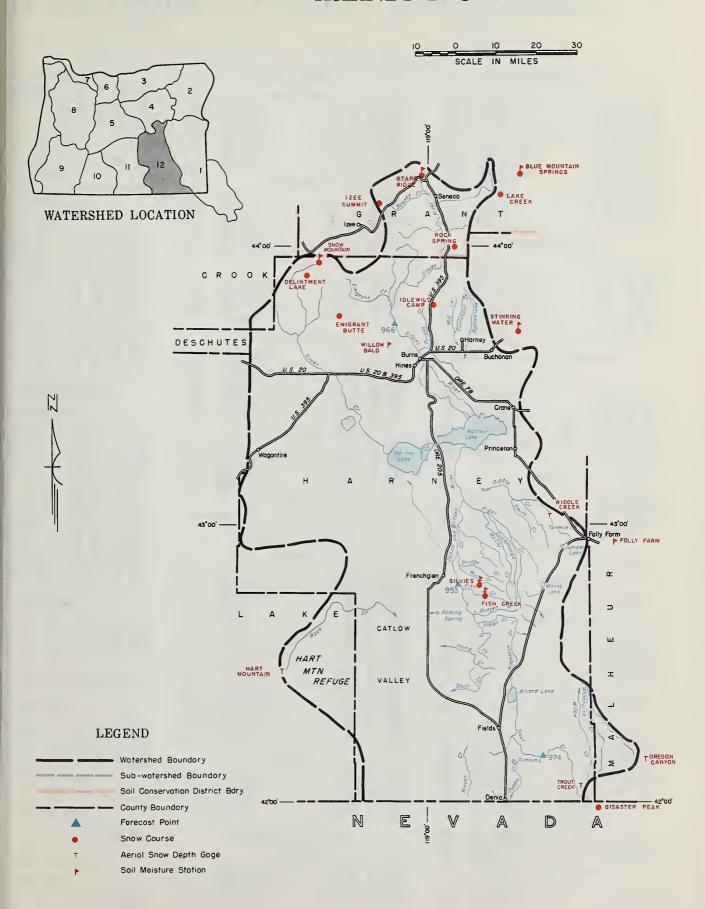
STREAMFLOW FORECASTS ° (1,000 Ac. Ft.)

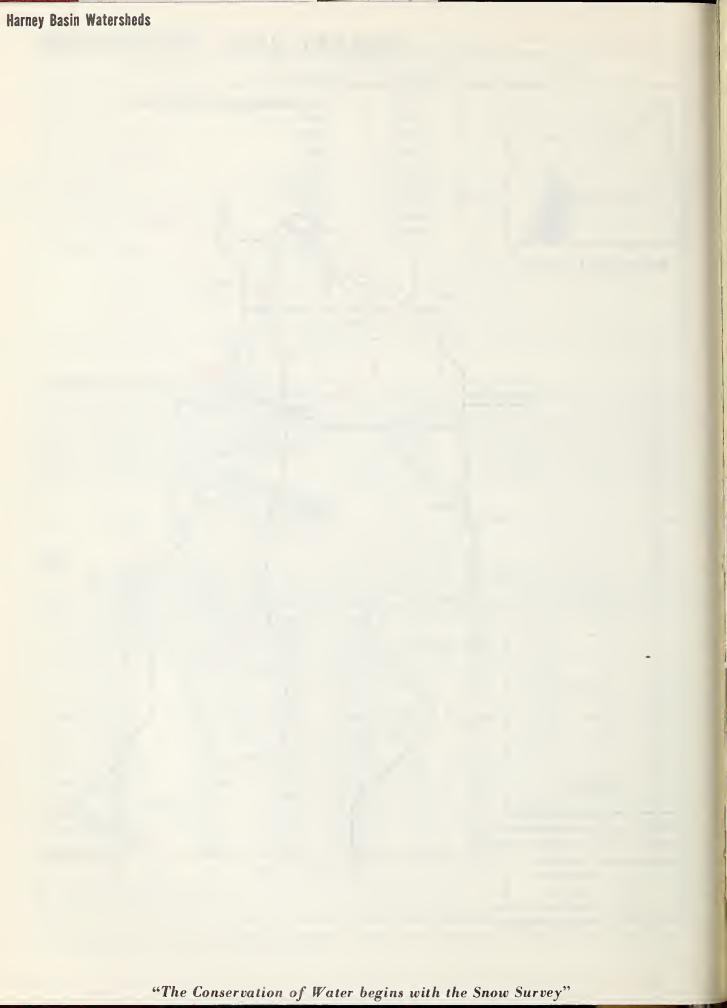
	FORECAST POINT	FORECAST	FORECAST	NORMAL	THIS YEAR AS PERCENT
NO.	NAME	THIS YEAR	PERIOD	NORMAL	OF NORMAL
953	Donner und Blitzen near Frenchglen	37	April - Sept.	66	56
966	Silvies near Burns	27	April - Sept.	102	26
974	Trout near Denio	2.0	April - Sept.	9.6	21
				100	

WONS		CURE	RENT INFORMAT	TION	PAST R	ECORD	
SNOW COURSE		DATE OF	SNOW DEPTH	WATER CONTENT	WATER CONT	ENT (Inches)	YEARS OF C
NA ME	ELEVATION	SURVEY	(Inches)	(Inches)	LAST YEAR	NORMAL b	RECORD
Blue Mountain Springs	5900	3-25	27	10.1	21.2	15.8	15
Delintment Lake	5600	3-27	10	3.8	10.1		4
Disaster Peak	6500	3-29	19	7.5	18.3		4
Emigrant Butte	5000	3-27	0	0.0	4.3		0
Fish Creek [†]	7900	3-27	39	12.9	37.9	26.1	13
Hart Mountain ^f	6350	3-25	0	0.0	1.5	1.7	10
ldlewild Camp	5200	3-26	1	0.4	6.6	4.6	15
Izee Summit	5293	3-26	10	3.8	12.4	7.5	15
Lake Creek	5120	3-25	19	6.7	15.3	10.1	15
Riddle Creek ^f	5800	3-27	0	0.0			0
Rock Spring ^f	5100	3-26	3	1.0	9.0	4.7	15
Silvies	6900	4-1	21	6.9	17.5	14.6	14
Snow Mountain	6300	3-27	26	8.4	17.1	15.1	9
Starr Ridge	5150	3-26	4	1.3	6.2	4.7	15
Stinking Water	4800	3-27	0	0.0	T	1.2	13
Trout Creek ^f	7800	3-27	10	3.4			0
Rock Spring incorrectly shown as aerial snow depth gage.							

*Assuming normal meteorological conditions. *1938 - '52, 15 year period. *Number of years in 1938 - '52 period. *Number of years in 1938 - '52 period. *Anot scheduled. *Carrected to natural flow. *Aerial snow depth gage; water content estimated. *9 Repart delayed.

HARNEY BASIN WATERSHEDS



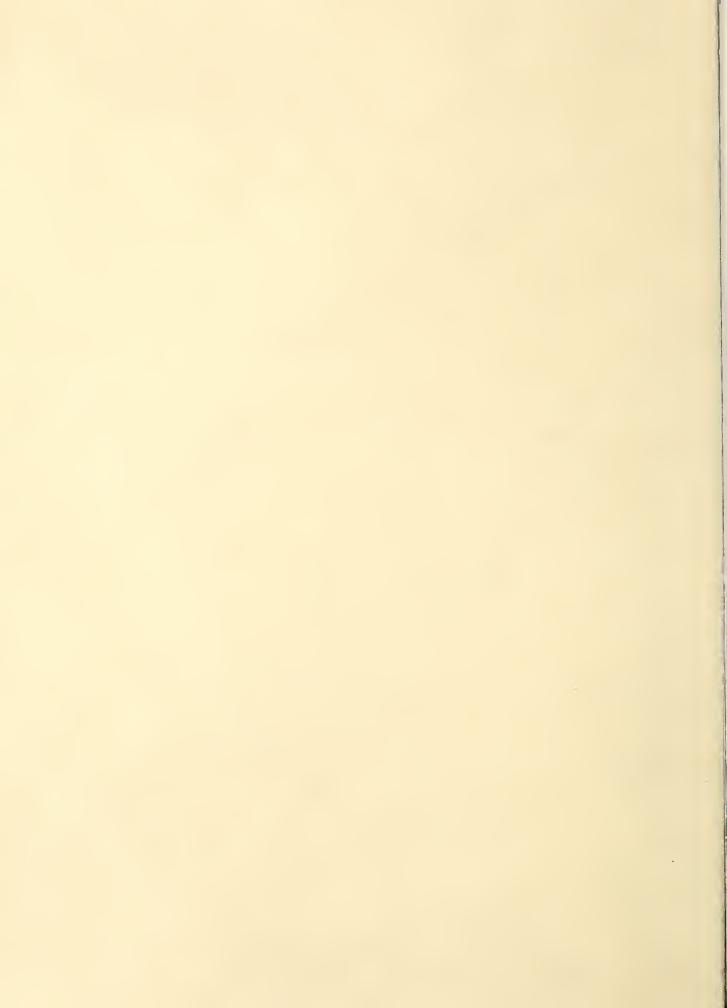


LEGEND COPCD Snow Station

tone	Location Elev Sec Two Rope	Number Nome	Location Elev Sec Two Rige	Number Name	Location Elev Sec Two Age	Number Name	Location Élev Sec Tup Rige
	R WATERSHEDS (1) RIVZE 26 275 38E 4200 (154) 10 115 12 5700 (Nev) 31 146 58E 7800 (Nev) 32 145 556 6700 (Nev) 32 545 556 6700 (Nev) 22 451 39E 7600 (Nev) 23 145 550 (Nev) 33 146 550	DATHER RIVER (CO. 1796 Quinn Ridge (New 1546 Rodes Flat (New 1546 Rodes Flat (New 1547 Rodes Rod) 9 4/N 41E 6300) 6 44N 53E 6800) 6 44N 53E 7100 29 23 39E 4100) 6 33 3W 6400 35 32S 32½ 6900) 35 75 5W 6340) 35 39N 53E 6800) 9 39N 53E 6700) 25 77 3W 5350 1 41E 38E 7800	SURNI, POWDER, PINI RONDE, INNAHA WATE BURNIT RIVER 1851A Barney Credk 1851B Sike Hountain Summit 1852 Chichorde Pass 1858 Cold Center 1859 Tipton	16 14.3 36E 5950 6 123 36E 5996 32 118 40E 5430 20 14.5 36E 4600 21 93 36E 5340 34 10S 354E 5100	1851 Anthony Lake 1809 Beaver Reservoir 18011 Casp Carson 1808 County Line 1808 County Line 1806 Licky Strike 1805 Heacham 24 & 1706 Hoss Spring 1807 Shokolmarm 18010 Sumnit Springs 1707 Tavior Green	16 4,5 4,5E 74,80 16 4,8 4,5E 70,00 18 73 37E 7125 8 55 37E 5140 8 55 37E 5140 28 4,8 34E 4800 28 13 12E 5950 28 13 12E 5950 28 13 41E 5870 28 13 41E 5870 3 65 42E 5740
Smile Feek Sepay Casp Sepay Casp Sepay Casp Sepay Casp Sepay Sepay Sepay See Grees, Hower See Grees, Upper See Grees, Upper See Grees See Sepay See Grees See	(Nev) 31 45N 568 6600 (Nev) 22 44M 39E 7800 (Ida) 36 365 41E 4300 (Ida) 46 365 41E 4300 (Nev) 18 42N 574 6800 (Nev) 9 42N 53E 7250 (Nev) 9 42N 53E 7250 (Nev) 28 42N 53E 8420 27 405 448 6440 (Nev) 18 43M 408 6700 (Nev) 18 43M 408 6700	18E14 Sarney Creek 18E16 Slue Mountain Spring 17E3 Bonit Greek 18E21 Solly Creek 17E2 Solly Creek 17E2 Solly Creek 17E2 Solly Creek 18E20 Claorado Parlite 18E20 Claorado Pass 18E16 Lake Greek 18F6 Elddle Creek	16 14.5 36E 5750 21 155 35E 5900 5 168 402 4600 10 178 37E 5300 36 168 37E 4300 10 198 39E 4300 21 168 34E 5375 20 14.5 38E 4600 10 168 331E 5375 20 14.5 38E 4600 10 168 331E 5800	18E1 Anthony Lake 18E5 Boomer Fountain 18E6 Condition Headous 18E6 Condition Headous 18E6 Sountie Lake 18010 Summit Springs Taylor Green PINE CHEEX	18 7S 37E 7125 33 8S 37E 5400 32 11S 40E 54,30 18 8S 38E 54,00 21 9S 36E 5340 4 9S 38E 6775 9 6S 37E 6000 3 6S 42E 5740	DONAHA RIVER	

MAP and INDEX to OREGON SNOW COURSES

Number	Nome	Locohon Sec Twp Rge	Elev	Number	None	Sec 1	cotion Two Re	Elev	Humber	Nome		Locali lec Twp	ien	
	UMATILLA RIVER (Cor	t'd.)			WILLAMETTE WATERSHE	EDS (6	91			KLAHATN RIVER			Rge	
18D12	Battie Mountain Summit Emigrant Springs	29 38 31E 29 1N 35E	4340 3925		CLACKAMAS RIVE				20112					
1804 1806 18015		28 3S 32E	5050	21015	Big Botton	25	68				(Cal) 3	1 401	N 1:	15
18D5	Pearson Grosk Meachan 24 8	28 3S 32E 31 2S 33E 25 1S 35E	3000 4300	21D13 21012	Ciackamas Lake Cleer Lake	35	53	7E 213 8½E 340	0 22012	*Finley Corraie Fournise Lake	1	1 40:	S 1	LOB
18D3	Tollgate	32 4N 38E	5070	21016	Lake Narriet	29	48 68	9E 350 7E 206 7E 350	0 2164	Gerber Nyatt Prairie Recervo:	1	9 36 12 39	S 1	5E
	WALLA WALLA RIVE	R		21014	Peavine Ridge 14 :	& 15 6	65 33 38	7E 350 98 560	00 22015	Lake of the Woode Park Neadquarters	1	15 39 11 37 8 31	3	3E 58 61
1803	Tollgete	32 4N 38E	5070	2109	Still Creck Timothy Lake	25	38	89E 370	2006	Cuartz Nountain Seven Lakes No. 1				
	Willow CREEK			21017			53	8E 329	22011	Seven Lakes No. 1 Seven Lakes No. 2		3 34	4.3	51
19D2	Arbuckle Mountain	33 4S 29E	5400		SANTIAM RIVER				20HL 2009	*State Line Strawberry	(Cal) 2	21 48	9N)	11
	UPPER JOHN DAY WATERS	HEDS (4)		22E1 22E2	Ostroit (town) Ostroit Osm		10S 10S	5E 156	00+ 2002	Summer Rim Sun Nountain		4 40	38	16
	UPPER JOHN OAY RI	VER		21E6 21E4	Nogg Pass Marion Forke	24	138	58 156 725 47 78 27	55 20013	#Sycan Flat		22 32 25 31	23 7	72
8E1	Anthony Lake	18 7S 37E	7125	22E3	Hill City	29			26	Taylor Butte			38	11
902 8D12	Arbuckle Mountain Battle Mountain Summit Beech Greek Summit	33 43 29E 29 38 31E 4 42S 30E	5400 4340	21E3	Santiam Junction Whitewater Bridge	14 28	138	7E 39	90 75	THE CALLFORNI FOWER COMPANY'S S	ODERO AT	N		
9E2 8E16	Beech Creek Summit	21 14S 34R	5900		NoKEVZ1E RIVER	D								
8E13	Blue Mountain Spring Blue Mountain Summit Derr	6 123 36E	5098 5670	21.E8					10	Beatty (COPCO) Bly 101 Rench (COPCO) Chiloquin (COPCO)		22 35	68 1	12
SELL	Oixie Springs	14 138 23E 28 118 34E 21 98 36E	6650	22E4	Dead Norse Grade Lost Creek Ranch	24	163 163	7E 38		Chiloquin (OOPCO) Crystai (COPCO)		34 31 26 31	43	7
8E8 9E9	Gold Center lime Summit	21 9S 36E 28 16S 29E	5340 5293	21E7 22E5	McKenzie NcKenzie Bridge	35 13	15S 16S	7½E 48		Fort Klamath (COPOO)		26 32	48 48 38	74
806 0E1	Lucky Strike Harks Greek	28 38 328	5050	22E6 21E9	Vida White Branch Slide	28	165	2E 8	00 6	Harriman Lodge (COPCO) Kirk (COPCO)		3 3	68	79767
0E2	Ochoco Meadows	21 13S 20E	5200	ELDY				7E 28	00 9 12	Quarte Hountain (COPCO) Yamsey (COPCO)) .	33 31	78	16
8E7	Olive Lake Schoolmarm	14 9S 33½B 28 4S 34E	6000 4775		MIDOLE FORK WILLAMETT	TE RIV	ÉR			14450) (00,00)		20).	13	-
)F1	Snow Hountain Sterr Ridge	1 19S 26E 20 15S 31E	6300	22F3 21F7	Cascade Summit Charlton Lake		233	6E 48	80	LAKE COUNTY, GOOSE L	AKE WAT	TERSH	EOS	,
3E9	Tipton	34 10S 35 B	5100	22F6	McCredie Springe	36	218	6E 57	20					ľ
				22F8 22F7	Meridian Oan Oakridge	16	198	1W 7 3E 13	50 10	GOOSE 1	AKE			
UI	PPER DESCHUTES, CROOKED V	ATERSHEDS (5)	22F5 22F4	Railroad Overpace Sait Creek Feile		228	5E 27 6E 40	sn 2001 s	*Bear Flat Meadow Cumue Creek			68 1	
	UPPER DESCNUYES RI	VER		22F2	Waldo Lake	15	22S 21S	6E 59				16 37	78 1	21
E1.3	Biack Pine Spring	14 16S 9E	4600	22F14	Wiliamette Pace			5½E 56	00 20G16 20N2	*Crane Nountain *Crowder Fiat	(Cal)	13 40	03 2 7N 3	21
F8 '	Caldwell Ranch	30 21S BE	4400		COAST FORK HILLAMETT	E RIVE	R		20N3 20G6	*Diemai Swamp Quartz Mountain	(Cai)	31 46	6N 1	16
2F3 1F7	Cascade Summit Chariton Lake	7 23S 6E 23 21S 6E	4880 5750	22F9 22F10	Champion Golden Curry Croek	12	238	1E 45	00 2011	«State Line	(Cal) :	21 48	8N :	11
1F11 1F9	Chemult Creecent Lake	21 27S 8E 11 24S 6E		22F13	Layng Croek R. S.	31	238	1E 31	00	Strawberry		4 40	08 1	16
1F14 1E6	Fire Road Nose Pess	36 218 11E	5050	22F12 22F11	Lund Park Wesver Creek	22 35	228	1E 17		ASERT 1	AKE			
1F4	Mungry Flet	24 13S 7½E 30 18S 11E	4755		MARYIS RIVER				20015	*Sear Flat Meadow				19
1F6 1F17	lrish-Taylor Mowlch	30 18S 11E 25 20S 6E 29 25S 8E 11 24S 6E 21 18S 9E	5500 4700						20011 20014	*Cox Flat *Finley Correis Mili Cresk		16 37	178 168	18
1F10 1F2	New Crescent Lake New Dutchman Flat	11 24S 6E 21 18S 9E	4800	23EL	Mary's Peak	21]	125	7W 362	0 2064	Mili Creek Quartz Mountain		1 3/	48 : 88 :	17
1F13	Paulina Lake	34 218 128	6330		ROGUE, UMPOUA WATER	cuenc			20010	*Sherman Valley		15 3	73	21
1F15 1F3	Paulina Prairie Tangent	28 18S 10R	54.00			13HED3	(9)			SUMMER	LUCE			
1E13 2F2	Three Creek Headows Waldo Lake	3 17S 9E 15 21S 6E	5600 5500		ROGUE RIVER				2002	Summer Rim		15 3	38	16
2F14	Willsmette Pacs	33 24S 59E	5600	2304 2206	Althouse Annie Soring	17	418 31S	7W 45 6E 60	30 18	SILVER				
2F15	Windigo Pass	20 25S 6E	5800	22021	Annie Spring Sig Red Mountain Sillie Greek Givide	31 30	408 368	1W 69 5E 53	00	Silver Creek	26 1	26 2	000	12
	CROOKED RIVER			22014	Fish Lake Fourmile Lake	3	37S 36S	4E 48	65 20013		E / W	25 3	13	14
E3	Derr	14 13S 23E	5670	22G12 23G3	Fourmile Lake Grayback Peek	9	403	5B 60 5W 60 4B 25	00	WARNER	LAKE			
B1 F2	Marke Creek Ochoco Meadows	25 12S 19E 21 13S 20E	4540	23H1 22G17	Nozei Visw (Cal) Nobert Lake	17	48N 40S	4B 25 3B 50	00	Canss Creek		4 30	98	
9F1	Snow Mountain	1 19S 26E	6300	22016	Hyatt Prairie Reservoir	15	39S	3E 49	00 20016	*Crane Hountain *Olemai Swamp	(Cal)	13 40 31 48	9S :	21
9E4	Temarack	8 15S 25E	4800	22G22 23G6	Little Red Mountain Oregon Caves	16	40S	2W 65 6W 40	00 1961	*Nart Mountain		1 3/	8N 6S	16
				2305	Page Mountain Perk Needquarters	8	41S 31S	7W 40 6E 64	45 20010	*Sherman Valley		15 37	7S :	2]
oo,	MILE CREEKS, LOWER DESCHI	JTES WATERSHE	DS (6)	22N1 22G10	Scragg Nountain (Cal)	9	47N 34S	10W 62 5E 68	00	GUANO 1				
	NOOD RIVER			22011	Seven Lakes No. 2	26	338	5E 62	00 1981	Baid Mountain	(Nev)	17 43	5N :	21
	NOOD RIVER			22G2 22G20	Silver Burn Siskiyou Summit	30 17	303 40S	4E 37 2E 46	20					~
1D6	Brooks Meadows Greenpoint Reservoir	2 2S 10E 28 2N 9E		2209 22018	South Fork Canal Wagner Butte	12	338	3E 35	00	HARNEY BASIN WA				
108	Phlox Point	6 3S 9E	5600	22018	Wagner Butte Whaleback	3	313	2E 51	40 1952	S1LV1ES RIVER -		28 19	98 2	
104	Red Hill Still Creek	21 1S 9E 25 3S 8 E	3700		UHPQUA RIVER				19F3	Enigrant Butte		14 2	13	27
107	Tiliy Jane	15 2S 9E	6000	22F9	Champion	12	220	1E 45	18F3 19E9	ldlewild Camp lzee Sunmit		33 20 28 10	6S 2	
	Mile CREEKS - MOSIER	CREEK		22F18	Dismond Lake	29	238 278	6E 53	15 1071	Rock Spring Snow Mountain		23 18	95	32
106	Srooks Meadows	2 2S 10E	4300	22F16 22F17	North Umpqua Trep Creek Whaleback		263 278	6E 42 4E 38	15 19E7	Starr Ridge Stinking Water		20 15	53	31
	LOWER DESCRIPTES RI		4,00	22G1 22F15	Whaleback Windigo Paes	3	31S 25S	2E 51 6E 58	40 1014	OOMNER UNO BLI				1
				46/17	ATHAVEA LEAD	20	470	ON 38			and nil		20	9.
1012 1E6	Clear Lake Mogg Pass	29 45 9E 24 13S 7èE	3500 4755		KLAMATH WATERSHED	OS (10)		1802 1901	Fish Creek Nart Mountain		4 33	38 : 66 :	25
		,- 120	,		KLAMATH RIVER				18F6 18G1	Riddle Creek Silvice		21 29 35 32	28	35 32
	LOWER COLUMBIA WATER	SHEDS (7)					210	/10		TROUT AND WHITE				ĺ
	SANDY RIVER			22G6 22G13	Annie Spring Billie Creek Divide	30	31S 36S	6E 60 5E 53	00				792	21
	Phlox Point	6 3S 9E	5600	2105	Biy Mountain 15	& 22		11E 5D	90 18H1 60 17G5	Disester Pesk Oregon Canyon	(Nev)	8 47	05 4	34,01
108						21	273		00 1803	Trout Creek		10 41		



CORRECTIONS - SNOW MAP AND INDEX

NEW SNOW COURSES (Too late for map entry)

Number		Name	Sec.	ocatio Twp.		Elev.
	OWYHE	E RIVER	Sec.	Iwp.	nge.	
	18G7	*"V" Lake	31	35 2 S	32¾E	6600
	MALHE	UR RIVER				
	18F7 18E22	*Call Meadows *Logan Valley	29 13	20S 16S	33E 33½E	5340 5100
_	HOOD 1	RIVER				
	21D20 21D21	Pineball Springs Urich Ranch Junction	31 28	1S 1S	llE llE	3850 3350
	MILE	CREEKS - MOSIER CREEK				
	21D20 21D21	Pineball Springs Urich Ranch Junction	31 28	1S 1S	11E 11E	3850 3350
	UMPQU	A RIVER				
	22F19	Diamond-Crater Summit	34	285	6E	5800
	KLAMA	TH RIVER				
	22G24 22F19 21F18 22G25	1 0 1	12 34 1 9	35S 28S 29S 36S	6E	6100 5800 4600 4150
	SILVI	ES RIVER - SILVER CREEK				
	18F7	*Call Meadows	29	208	33E	5340
	DONNE	R UND BLITZEN RIVER				
	18G7	*"V" Lake	31	35 2 S	32¾E	6600
	TROUT	and WHITE HORSE CREEKS				
	18G6	*Denio Creek	14	41 S	34 E	6000

ERRATA

16G10	*Bull Basin - should read Range 5 west.
18F6	*Riddle Creek - is aerial snow depth gage.
17G5	*Oregon Canyon - is aerial snow depth gage.
18G5	*Trout Creek - is aerial snow depth gage and
	is shown incorrectly as 18G3.
18D12	Shown in 19 D block on map should be deleted.

The following organizations cooperate in the Oregon Snow Survey work:

STATE

Idaho Cooperative Snow Surveys

Nevada Cooperative Snow Surveys

Oregon Agricultural Experiment Station

Oregon State Engineer and Corps of State Watermasters

Oregon State Highway Engineers

Soil Conservation Districts of Oregon

FEDERAL

Department of Agriculture

Cooperative Extension Service

Forest Service

Soil Conservation Service

Department of Commerce

Weather Bureau

Department of the Interior

Bonneville Power Administration

Bureau of Reclamation

Fish and Wildlife Service

Geological Survey

Indian Service

National Park Service

Department of National Defense

Corps of Army Engineers

PUBLIC UTILITIES

California-Pacific Utilities Company

Pacific Power and Light Company

Portland General Electric Company

The California Oregon Power Company

MUNICIPALITIES

City of Baker

City of La Grande

City of The Dalles

City of Walla Walla

IRRIGATION DISTRICTS

Associated Ditch Companies

Central Oregon Irrigation District

Deschutes County Municipal Improvement District

East Fork Irrigation District

Grants Pass Irrigation District

Jordan Valley Irrigation District

Lakeview Water Users, Incorporated

Medford Irrigation District

North Board of Control - Owyhee Project

North Unit Irrigation District

Ochoco Irrigation District

Rogue River Valley Irrigation District

South Board of Control - Owyhee Project

Talent Irrigation District

Vale-Oregon Irrigation District

Warmsprings Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company

The Crag Rats, Hood River, Oregon

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
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PORTLAND 4, OREGON

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Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"The Conservation of Water begins with the Snow Survey"